

Supporting Documents

I.	Whole Estate Forest Plan : 2012
II.	Moorland Management Plan : 2012 : outline
III.	Visitor Management Plan : 2012
IV.	Deer Management Plan : introduction
V.	Riparian & Hydrological Plan : 2010
VI.	Farmland Plan : 2011-16
VII.	Monitoring & Research Plan 2012
VIII.	Mar Lodge Estate Management Principles : 2006
IX.	Mar Lodge Estate Statement of Significance : 2012
X.	Special Designations (of all or part of the estate) : 2012



the National Trust
for Scotland
a place for everyone

I

Mar Lodge Estate

Whole Estate Forest Plan 2012

Introduction

The Whole Estate Forest Plan (WEFP) is a key subsidiary plan, underpinning the main Management Plan. Work on the WEFP began in 2008, and the document is now at an advanced draft stage. Key stakeholders have been involved throughout the production of the plan, and extensive use has been made of relevant experts and consultants.

The purpose of this plan is to describe the future long term vision for the woodlands across Mar Lodge Estate and to detail a 20 year work plan which will put in place the building blocks necessary for attaining the 500 year vision. The plan recognises the need for sustainable management of the woodland resource and details the role woodland across the estate has to play in a social, environmental and economic context.

The Mar Lodge Estate Independent Review Panel (IRP) made many recommendations relating to woodland management. All the recommendations made by the IRP had previously been discussed by the core project group and have been fully integrated within the plan.

Detailed costing of this plan is underway and will be completed, along with the detailed work programme, by the end of July 2012. Following consultation, this plan will then be finalised.

It should be noted that many elements of the plan are already underway. The IRP refers to a “period of experimentation” and, during May 2012, 1300 birch saplings were planted as the first stage of mob planting trials. Plantation thinning works are already scheduled, fence removal has begun in the regeneration zone and a contract has already been tendered for a new fence at the Linn of Dee. Heather cutting and scarification trials are also scheduled for later in the year (2012.)

In addition to the issues specifically covered in the WEFP, there will be an implicit need to integrate the WEFP with the Deer Management Plan, the Moorland Plan and the Visitor Management Plan. Together, these four key documents will underpin the Mar Lodge Estate Management Plan 2012 – 16.

Mar Lodge Estate Forest Plan

A: Introduction

A:1 Background

Mar Lodge Estate lies at the heart of the Cairngorms National Park and contains some of the most remote and scenic wild land in Scotland. Covering 29,380ha, the estate was acquired by the National Trust for Scotland in 1995. A full description of the estate, the vision for the estate and its management objectives is described in detail in the “Mar Lodge Management plan 2011-2016”. This document, the Mar Lodge Estate Forest plan, forms a subsidiary plan sitting within the context of the full estate plan. The purpose of this plan is to describe the future long term vision for the woodlands across Mar Lodge Estate and to detail a 20 year work plan which will aim to put in place the building blocks necessary for attaining the 500 year vision. The plan will recognise the need for sustainable management of the woodland resource and detail the role woodland across the estate has to play in a social, environmental and economic context.

A:2 Landscape

Mar Lodge Estate is a spectacular landscape with significant wild land, cultural and natural heritage character. Within its boundaries are fine examples of classic features of a highland landscape: remnants of the ancient Caledonian pinewood, heather moorland, clear fast flowing streams, juniper scrub and a large part of the Cairngorm plateau. These features stand alongside the remains of settlements, shielings and other archaeological sites which hint at the historic occupation and land-use of the estate. The “quality” of the landscape within Mar Lodge has been recognised by its inclusion within both the Deeside and Lochnagar and the Cairngorm Mountain National Scenic Area along with the whole estate being an integral part of the Cairngorms National Park (CNP).

A:3 Nature Conservation

The estate supports a vast diversity of habitats, plant and animal species, many of which are rarities in a UK or European context. This nature conservation interest has led to over 40% of the estate being designated as a Site of Special Scientific Interest (SSSI), Special Area of Conservation (SAC) and Special Protection Area (SPA) (Mar Lodge Management Plan 2011-2016). Over a fifth of the site lies within the Cairngorms National Nature Reserve (NNR), and two high level lochs are designated as wetlands of international importance under the Ramsar Convention.

A:4 Archaeology Cultural Heritage – to follow

A:5 Climate

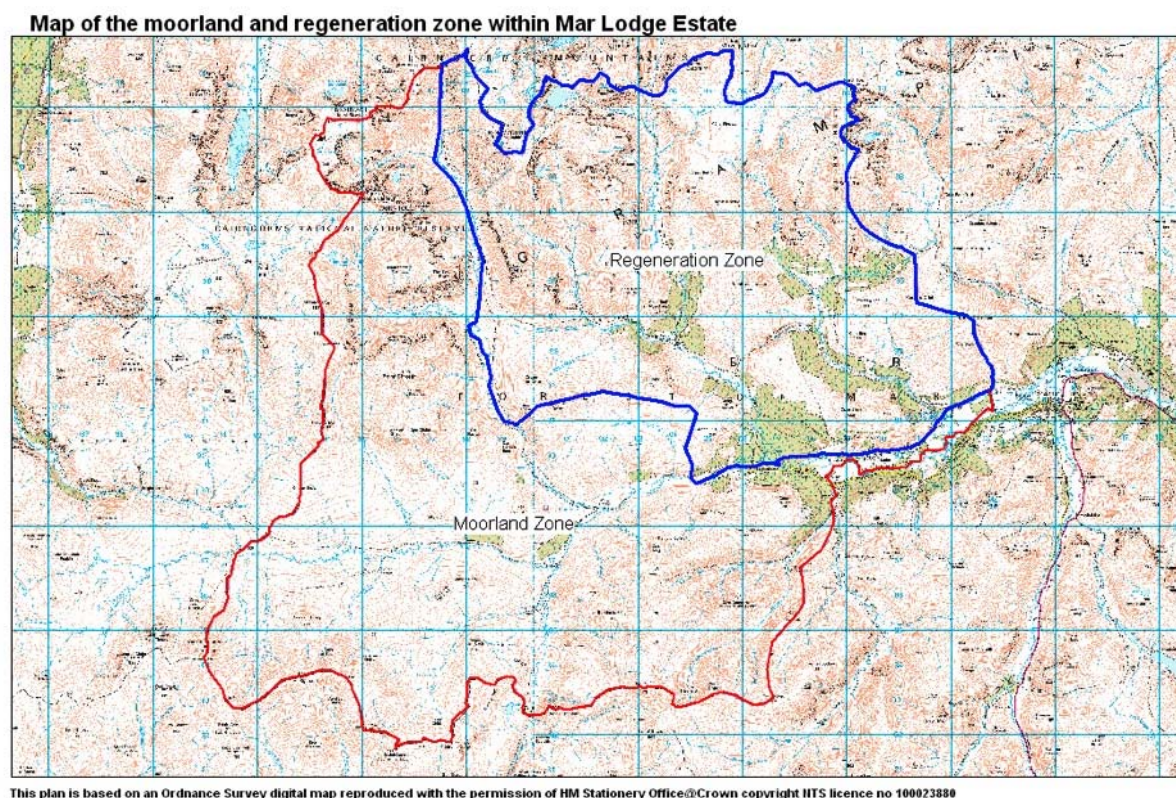
The climate in the eastern Cairngorms is “subarctic oceanic” but less “oceanic” than the west coast of Scotland. There is a large difference between summer and winter with respect to day length and insolation received, which is important for the growing season. Temperature drops quickly with altitude resulting in a rapid decline in the length of the growing season with altitude. Precipitation varies from 2250mm/yr on the Cairngorm summits to 900mm/yr in the Dee valley (Gimingham 2002) with the average monthly fall for Braemar 913mm between 1971 and 2000 (<http://en.wikipedia.org/wiki/Braemar>). June is usually the driest month in the eastern Cairngorms. The average temperature in Braemar between 1971 and 2000 was 6.3° degrees Celsius with the lowest average mean temperature being recorded in January (mean daily max. 4.1° min -1.8°) and the highest in July (max 18.1° min 8.7°) (<http://en.wikipedia.org/wiki/Braemar>). The Cairngorms are the snowiest part of Britain and the annual average number of days on low ground with snow lie is 60days/yr and up to 200days/yr on the mountain tops. Days of snow lie have however declined in recent years. The prevailing winds in the Cairngorms are from the south west and it is not uncommon to experience gales at high altitudes (Gimingham 2002).

A:6 Estate Management

The management of Mar Lodge Estate is guided by a set of management principles agreed with the Easter Charitable Trust and also the terms and conditions set out in the Management Agreement (1995) between NTS and Scottish Natural Heritage (SNH) (Mar Lodge Management Plan 2011-16). The three main objectives are to conserve the internationally important natural and cultural heritage, to maintain Mar Lodge as Highland Sporting Estate and to ensure appropriate public access. NTS aims to demonstrate that Highland sporting objectives and conservation objectives need not be mutually exclusive but can be managed hand in hand with both objectives being successfully achieved.

The approach to deer management is critical for NTS to be able to achieve both its sporting and conservation objectives particularly with respect to woodland regeneration. To this end, the estate has been split into two management zones - the regeneration zone and the moorland zone (Mar Lodge Management Plan for full description, Mar Lodge Section 7 agreement 2010 & Figure 1). The regeneration zone includes all the pinewood areas (Glen Derry, Luibeg, Lui and Quoich) and in this area NTS is striving to achieve natural regeneration and recovery of the pinewood (Mar Lodge Management Plan objective 1, SAC objectives see Appendix 1) through reducing deer numbers and hence alleviating grazing pressure (Mar Lodge Management Plan, Mar Lodge management principle (iii)). At present, after several years of experimentation, this involves reducing the deer population to as low a point as possible. However, once extensive regeneration has established it is hoped in future years that the deer presence within the regeneration zone can be increased. The moorland zone covers the south and western part of the estate and in this zone deer are managed to provide a sporting resource from which NTS can continue with sport stalking activities and to maintain the moorland habitats in favourable condition. The Trust aims to maintain a red deer population (approx 1650 red deer) from which it can shoot 80 to 100 stags with guests.

Figure 1.



A:7 NTS wide policies

In addition to the site specific Mar Lodge Management Principles, the estate must also be managed within the context of a number of overarching NTS wide policies. Some of these have particular relevance to the Whole Estate Forest Plan and the likely management it will entail - Wild Land Policy (2002), Conservation Principles (2003), Access and Enjoyment Principles (2005), Deer management policy (2003), Landscape Policy (2005) and Environmental Policy (2004).

A:8 Mar Lodge Independent Review

Over the last few years there has been growing criticism of the management of Mar Lodge particularly from neighbouring sporting landowners, the sporting community and the local community. This has focussed particularly on the reduction in deer numbers and the perceived implications of this on the neighbours and communities interests. In response to this criticism, in spring 2012 the chairman of NTS commissioned a panel to conduct an independent evidence-based review of woodland, moorland and deer management at Mar Lodge Estate, having regard to the National Trust for Scotland's overall objectives for the Estate, and specifically, fencing policy, deer culling, the regeneration of the forest and maintaining a sporting estate. The review panel produced their report with eight management recommendations in November 2011 (Mar Lodge Independent Review Panel Report 2011).

This report has specific implications for the Whole Estate Forest Plan in relation to fencing, ground disturbance and planting of trees. Prior to the review the Trust had a presumption against fencing and reservations about planting and ground disturbance due to the management principles but also the impact of these practices on wild land quality, landscape, woodland grouse and access (Mar Lodge Management plan 2011-2016, NTS policy documents). However, the review panel made specific recommendations about fencing, planting and ground disturbance and this has facilitated a decision to go ahead with these practices in certain circumstances. While this may have short term implications for wild land quality, access and landscape it should reap longer term benefits for the woodland structure and function both within Mar Lodge and between Mar Lodge and neighbouring estates.

A:9 History of the Mar Lodge woodlands

The woodland within Mar Lodge Estate is dominated by Scots pine but also includes areas of Birch, Larch and Norway Spruce. Other species such as Alder, Aspen, Rowan, Willow and Juniper are in scattered and dispersed patches. The Mar Lodge woodlands have had a history of clearance for the commercial exploitation of timber and to create grazing land in the glens. There is also evidence to indicate that historic planting of Scots pine has occurred. The depletion of forest habitat in the 17th, 18th and early 19th centuries led to the development of open hill stalking as a sport in the early 19th century which led to an increase deer numbers and put an end to natural woodland regeneration by the 1830s (Urquhart *et al*/2001). Evidence suggests that the overall extent of woodland has changed little since the late 19th century. Further woodland was lost during the two world wars when there was a high demand for timber. However this loss in terms of area, has been compensated for by the conifer plantations that occurred initially for deer shelter but latterly as new native pinewood schemes.

A:10 Current woodland component (Figure. 2. current woodland extent)

The woodland currently supported across the estate can be broadly categorized into types -

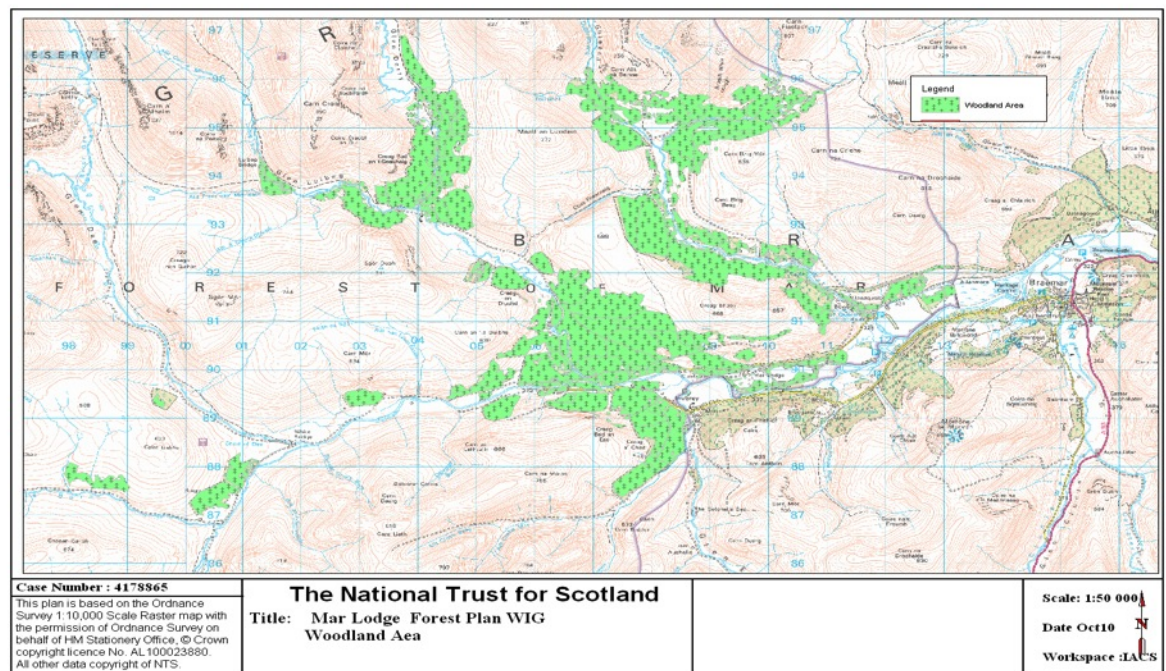
1. Semi-natural woodland - predominantly Scots pine dominated remnant Caledonian pinewood but also some areas of upland birchwood. This woodland occurs primarily in the regeneration zone although some small pockets of broadleaved trees occur in the moorland zone on crags and along riversides. The remnant Caledonian pinewood (Steven & Carlisle 1959) at Mar Lodge today extends to 840 ha. It is a scattering of “granny pines” (190 years and up) with little evidence of regeneration. Many of the trees show signs of senescence and there is an urgent need to initiate regeneration if the future of the woodland is to be secured. The Caledonian pinewood is a designated feature of the SAC and there is a legal requirement to bring it into favourable condition. Until recently it has been classed as in “unfavourable condition – favourable management “ but in light of recent progress with deer management and regeneration this has been upgraded to “unfavourable but recovering condition”. There are two main stands of birch woodland (mixed with pine) in mid-Glen Quoich and Mar Forest, otherwise broadleaved woodland is mainly scattered along the riparian corridors and on exposed and inaccessible crags.

2. Plantations - a variety of plantation origin woodland occurs across the estate within both the regeneration and moorland zones. This falls into three general categories: 1. 1960's and 70's plantations, 2. Late 1980's and early 90's new native woodland schemes and 3. small enclosures established by the Nature Conservancy Council. The total area of the 1960 and 70's plantations is 683 ha. A number of these early plantations contained both non-native species (lodgepole pine, sitka spruce and larch) and/or Scots pine of non-local origin however since 1995 management has focused on their potential to be "naturalised". This has led to extensive remedial work, much of this grant aided, including fence removal, removal of non-native species (except European larch), thinning and restructuring. All Scots pine has been left irrespective of the origin and regeneration seeded from plantations is starting to occur. Generally the plantations in the regeneration zone have had more of this type of work carried out than those in the moorland zone.

In the late 1980 and early 90's a number of new native woodland schemes totalling 85.6ha were established containing Scots pine and a variety of hardwoods. These were and still are fenced to deer and were established initially with no ground preparation or fertiliser. Between 1956 and 1990 the Nature Conservancy Council established thirteen enclosures (deer fenced) totalling 101 ha within Glen Derry and Luibeg. Some of these were planted and others left for natural regeneration. The purpose of these enclosures was two-fold. Firstly to establish a future seed source in the glens where the mature pines were already infrequent and being lost and secondly to experiment with the effect of ground preparation and fertilisation on the success and speed of establishment (Ross 2000).

3. Designed landscape woodland - during the Victorian era, planting took place usually as landscaping in conjunction with building works and this comprises the designed landscape woodland. Policy woods were laid out around Mar Lodge itself and plantations were established at the Linn of Dee, around the Linn of Quoich and at Derry Lodge. Small outcrops of trees were also established at the outlying shooting lodges. The main species planted were Scots pine, European larch and Norway spruce but a wider range of species was grown in the policies very much in keeping with the plant collecting practice of that period. Much of the original planting was clearfelled during the second world war and over the last 20 years or so there has been small scale planting within the policy woods in character with the 19th century landscaping. The extent of this woodland is now approx 207 ha.

Figure 2. Current woodland extent



A:11 Whole Forest Plan conception, vision and objectives

This forest plan was developed upon the recognition that NTS had no overall strategic plan for all the woodlands at Mar Lodge Estate and that the recovery of the Caledonian pinewood was progressing very slowly. To date the woodland habitats across the estate have not been considered together as a whole nor has the potential value of the woodland habitat for biodiversity, deer management, landscape and commercial value been considered collectively. In order for NTS to develop a forest plan it has been necessary to agree a long term vision for the future of the woodlands. This has been completed for the semi-natural and plantation woodland on the estate but this has not yet been possible for the designed landscape woodland as there is still thinking and work to be done in this area (see objective below).

The 500 year vision for the semi-natural and plantation woodland on Mar Lodge Estate is:

"To have established a self-sustaining intimate mix of structurally and compositionally diverse woodland and non-woodland habitats extending from the valley floor to the natural altitudinal limit for tree growth; that are ecologically and culturally appropriate for the site and climatic conditions, that increase connectivity between habitats (particularly the remnant pine areas) across the landscape and within the site through the development and expansion of woodland networks, that respect and where

possible enhance conservation of the estate's cultural heritage assets and that provide a range of ecological and social services without the need for intensive management. "

Within the scope of this vision and with reference to obligations from designations as well as with reference to previous reports and plans the NTS have identified a number of detailed objectives for the Mar Lodge Estate forest plan:

Semi-natural woodland:

1. Achieve "favourable condition" status of the Caledonian pinewood within the next 20 years through meeting the conservation objectives for the SAC
2. In the next 20 years, establish regeneration in areas where mature trees, particularly outliers are being lost and where further fragmentation is likely in the next few years.
3. Create suitable conditions through control of browsers and field layer management to allow ongoing regeneration and henceforth woodland expansion.
4. Improve the potential connectivity of woodland within the estate and with neighbouring estates through the establishment of seed source planting and riparian woodland as well as contributing to the Cairngorms National Park forest network plan and the Upper Dee Riparian project.
5. Develop a methodology within the next year to deal with potential pre history archaeology in areas where ground disturbance is planned. Within the next five years produce a map predicting the likely locations of pre history archaeology across the estate.

Plantations:

1. Manage the plantations through thinning, deadwood creation and restructuring to improve their contribution to the woodland habitat and their biodiversity value.
2. Manage the plantations where relevant to facilitate deer management and to provide winter shelter for deer.
3. Exploit the plantation resource for its economic value and as a fuel source for renewable power generation where this does not compromise the first two objectives.

Designed landscape:

1. Develop a designed landscape plan within the next two years which details a vision for the designed landscape woodland and actions towards achieving this vision.

A:12 Forest plan development

This document is the culmination of work between NTS staff and a number of external partners and advisors. NTS commissioned two contractors to provide specialist advice on the future management of the semi-natural woodlands and plantations and the riparian woodland habitat. Subject to a brief written by NTS, Colin Edwards (formerly Forest Research) produced a "Regeneration Management Plan for Mar Lodge Estate woodlands" document which builds and modifies his earlier work "Developing a Regeneration Management Plan for Mar Lodge Estate native woodlands: 2010-2030" and this forms the primary reference document for this whole forest plan and 20 year work plan for the semi-natural woodland and plantations (Appendix 1 & 2). Similarly, in response to an NTS brief a second advisor, Carol Robertson (Scottish Native Woods) produced a "Mar Lodge Estate Forest Plan, Riparian woodland" (Appendix 3) which supplemented her work on parts of Mar Lodge reported in the "Upper Dee Riparian Woodland", (a discussion paper for the Cairngorm National Park Authority). Again these are important reference documents for this plan in that they outline the opportunities for riparian woodland creation across the estate and suggestions for the 20 year work plan for riparian woodlands. While some work has been done on the designed landscapes on Mar Lodge we are not yet in as clear a position to prepare a plan for their future as we are with the other types of woodland. It is therefore proposed that discussions between the NTS archaeologist and the group of Archaeological and Cultural Heritage advisors landscape advisers that has been formed continues with the aim of having a plan and work schedule in place by year 5. Scottish Natural Heritage and Forestry Commission staff were an integral component in the development process of this plan and the ongoing liaison with the specialist advisers as they were developing their plans for Mar Lodge.

A:13 Preparatory work

In order for Colin Edwards and Carol Robertson to produce meaningful work plans to show where activities like planting and scarification could take place it was necessary to identify the areas where such activities would not be acceptable, hence a "constraints" Figure 3. A "constraint" was considered a condition or situation that would prevent access to a location within the Estate or where disturbance of the soil, vegetation layer or intrusion of seedling regeneration was considered undesirable (see Appendix 1). The following constraints were considered: designed landscape, archaeological sites and sensitivity, nature conservation interests, raptor breeding areas and machine access. A detailed explanation of these constraints is given in "Regeneration Management Plan for Mar Lodge Estate woodlands" (Appendix 1). Further refinement of this layer will be possible if additional features are located. While it is highly unlikely that any extensive areas are missing from this constraints layer the opposite is also true in that many areas too small to appear at this scale of mapping will have been missed. Therefore all potential work areas will be walked over prior to producing detailed site operational maps.

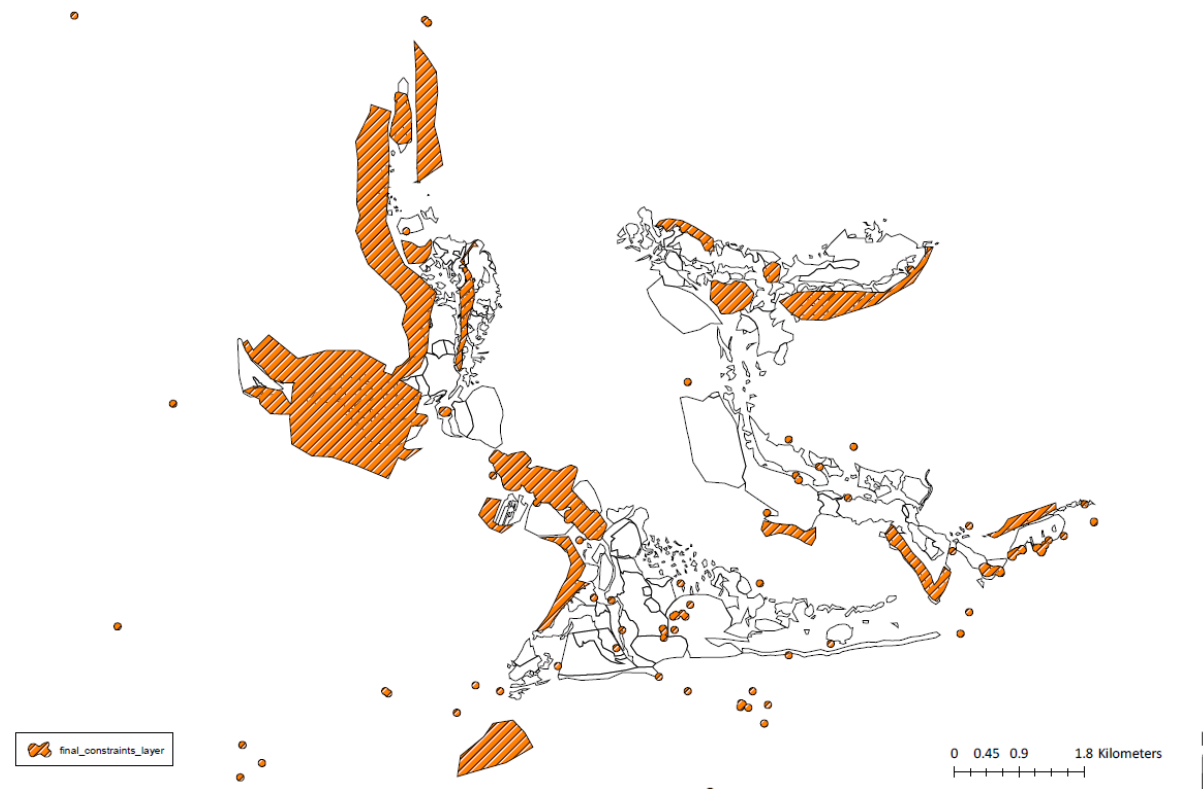


Fig. 3. Constraints layer as produced by C. Edwards 2011

B: Regeneration Zone

B:1 Description

The regeneration zone is the area of the estate which supports the majority of the estates woodland and hence has the greatest potential for woodland regeneration and expansion. It includes the remnant Caledonian pinewood (Steven & Carlisle 1959), semi-natural birch woodland, most of the new native pinewood schemes and a number of the 1970's plantations. It is in this zone where NTS are focussed on achieving the semi-natural woodland objectives 1-3 of this plan which involve the restoration and expansion of the native Caledonian Pinewood. Semi-natural woodland objectives 4 and 5 and objectives 1-3 for the plantations will also be addressed in part in this zone along with the moorland zone (see later).

At the present time semi-natural woodland is to be found between 300 and 550m though some individual trees can be found at over 600m with a suggested nominal tree line of 650m (Appendix 1). Montane scrub (juniper, willows, dwarf birch etc.) does occur above this height but is not a specific priority at the outset of this 20 year plan. The potential extent of the montane scrub community is becoming increasingly apparent as the effects of the reduced grazing pressure, particularly in recent years, are being recognised. The development of montane scrub will be monitored in 5 years time and an assessment will be made as to whether any intervention to boost this community is required within the remainder of this plan.

Should intervention be deemed necessary at this time, potential areas of the regeneration zone that are suitable for expanding or establishing tree-line montane scrub woodland can be derived from woodland suitability maps produced by Colin Edwards (Appendix 2 & see below).

The geology is fairly complex as the regeneration zone is located across the boundary between the main granite mass of the Cairngorms and other underlying strata such as gneisses and other rocks of the Central Highland Granulites or Moine series. This means the west side of Glen Derry is granite while most of the east is of Moine origin with Calcareous outcrops. Moine gneiss underlies most of Glen Quoich. The soils originate from glacial drift of varying texture and all contain a high proportion of quartzose material. The freely draining areas with coarse texture soils have the best stocked pinewood while the more open stocked areas are probably the result of impeded drainage (Steven & Carlisle 1959).

The regeneration zone supports a diverse mosaic of NVC habitats (Rodwell 1991) but particular habitats types dominate. Dry heath, Blanket bog, Pine and birch woodland and wet heath NVC communities are prevalent across most of the lower altitude areas of the zone with montane heaths and grasslands at higher altitudes. NVC data was used by Colin Edwards (Appendix 2) to generate spatial suitability maps for woodland habitats across the regeneration zone (See Fig. 4). These maps illustrate the potential woodland habitats that could grow in the regeneration zone based on an analysis of soil moisture and soil nutrient regimes and subject to further modification by climate. Current wooded areas were not included in the analysis but assumed to be suitable. Over the majority of the lower elevations in Mar Lodge, NVC W18 (*Pinus sylvestris* - *Hylocomium splendens*) is the principle woodland habitat. This has been divided into three categories based on its current suitability for woodland establishment (Appendix 2) and these have formed the basis for the prioritisation of work within this plan.

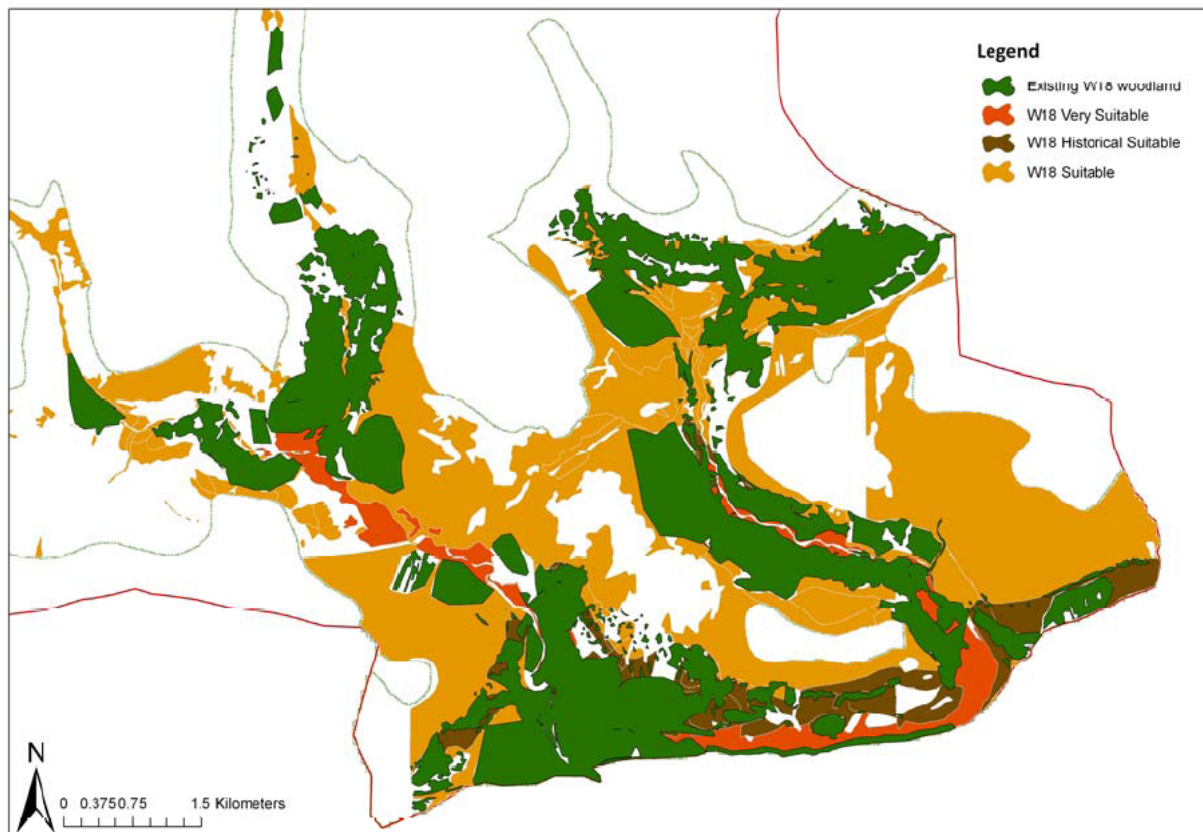


Fig 4. Suitability map for expansion of NVC 18 woodland from C. Edwards 2009 (Appendix 2)

B:2 Nature Conservation

The mainstay of the regeneration zone is covered by a number of national and international designations (Mar Lodge Management Plan 2011-2016). These include SPA, SAC, SSSI, NSA, NNR, Ramsar Sites and National Park. The notified features of these designations can be individual species, habitats or geological formations and any expansion of the pinewood may have possible implications for the features (Appendix 4). The priority habitat most likely to be affected by woodland expansion is dry heath, as it occupies the sites most suitable for pine regeneration. While all such potential conflicts will have to be considered, in this particular case there is an agreement between Scottish Government and SNH that that the expansion of the pinewood would have priority over dry heath within the Cairngorms National Park. In most cases areas of conflict between notified features of the designations and planned work for woodland expansion has been avoided through the process of constructing the constraints map (see earlier). However any further conflicts will be identified on the ground prior to any works beginning.

B:3 Archaeology-Cultural Heritage

There are a large number of Scheduled Ancient Monument sites within the regeneration zone which are protected and subject to an inspection programme supervised by the NTS archaeological team (Mar Lodge Management plan 2011-2016). The majority are sheiling and farming community sites that reflect the historical use of the glens. While these sites are of significant cultural heritage value and offer good interpretation/education potential they also

pose management issues within a woodland expansion zone. At present the use of a buffer zone around these sites will solve the immediate conflict with no works carried out within this zone. However ongoing regeneration and woodland expansion does pose a management issue for the future. Another issue is that while some archaeological sites (particularly those on the river flats) were once a very visible feature in the landscape, the reduction in grazing pressure and consequent vegetation growth has seen them become less visible. Some sites are now possibly at risk from unsuitable vegetation encroachment. So while the use of buffer zones is a very blunt and appropriate tool for the present, it is envisaged that as our knowledge grows, the management of archaeological sites will be refined and modified. Consideration will be given to implementing a grazing regime as a tool for maintenance of SAM sites.

A gap in archaeological knowledge is presented by the plantations in that they were not surveyed by the Royal Commission due to their dense nature. NTS intend to carry out walk over surveys prior to any work within them to identify and record sites and thus manage the works accordingly.

There are two designed landscapes in the zone in the form of the area closely surrounding Derry Lodge and the Lower Quoich (around Queen Victoria's picnic lodge). At present our knowledge of what form these areas took is not sufficient to adequately support a plan for its maintenance. Hence this will be addressed as part of the work to be undertaken under the Designed landscapes section.

B:4 Semi-Natural Woodland

The two reports produced by Colin Edwards (Appendices 1 & 2) along with the stand structure survey (Appendix 5) emphasised three issues with the semi-natural woodland habitat, 1: the loss and non replacement of old growth pinewood, 2: the lack of connectivity of the pinewood stands and 3: the need to ensure ongoing low level pine regeneration recruitment. Addressing these three issues is the focus of this plan for the regeneration zone. In 20 years it is only possible to start to address these issues but it is important that this is undertaken.

- 1- *the loss and non-replacement of old growth pinewood* - It is accepted that due to the length of heather, depth of the moss/litter layer and lack of exposed mineral soil, regeneration is not going to proceed fast enough to realise the long term woodland vision without some sort of intervention. Intervention is the removal of the vegetation layer and disturbance of the soil to create a better seed bed. The soil disturbance methods that will be implemented are different types of scarification. These are detailed in a scarification matrix produced by Colin Edwards (Pages 12-13 Appendix 1).

Through a process of overlaying constraints, NVC community, machine accessibility and stand structure, the areas where intervention is possible and most likely to produce regeneration, have been identified. These areas are indicated in an "allowed disturbance" map layer (see Fig. 5 page 9 Appendix 1). It is envisaged that intervention work would be staggered over areas and over time with the aim of introducing an age structure to the resulting regeneration. To this end 3 work circles have been established where work over the next 20 years will be focussed (Figure. 5). and these work circles will be tackled in succession. It is also understood that this work will be dictated in any year by the predicted pine seed fall and hence plans need to be flexible.

The pine seed fall will be predicted by counting female flowers and immature conelets at 24 and 12 months respectively, in advance of a potential seed year.

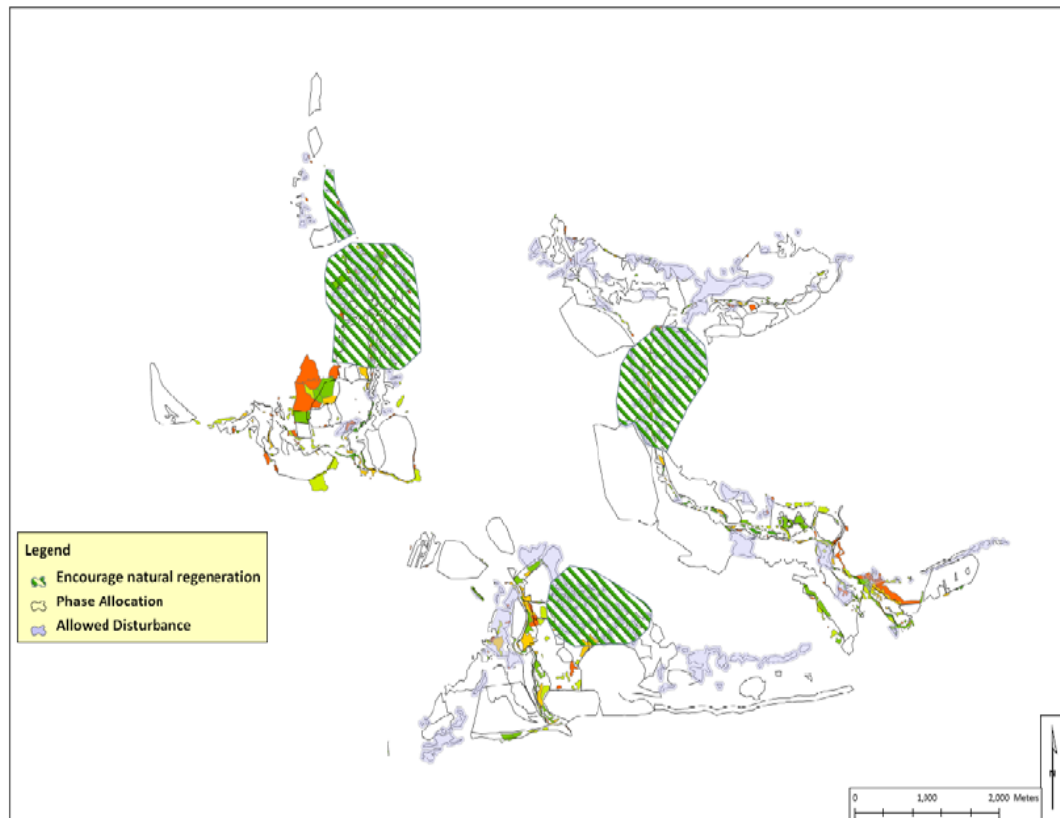


Fig. 5 Location of work circles and proximity to existing natural regeneration from C Edwards 2012 (Appendix 1).

It is accepted within NTS that there may be the need for some intensive ground disturbance to encourage regeneration despite possible impacts on wild land, landscape and access. The level of intervention applied will be that suited to the topography, vegetation and soil and adequate to produce the desired results. Intervention will be carried out sensitively with consideration given to the landscape and wild land impacts in the location, distribution and size of disturbed areas. During the first 5 year period of this plan NTS will experiment with different types of scarification in different areas in an attempt to identify preferred methods of disturbance that minimise impacts on other criteria that NTS deem important but also produce results. This method(s) of intervention will be used in the autumns prior to expected good seed years over the remaining periods of the plan. Work will be carried out in autumn as the seed bed created will remain un-vegetated and hence receptive until seed fall the next spring and also this avoids sensitive times of the year for breeding birds. Target densities and species values will need to be identified prior to intervention work being carried out. This will allow an assessment of whether the intervention has been successful and whether or not it should be repeated or the type and level of intervention manipulated.

Once seedlings are established in disturbed areas, it is important that this new regeneration is protected. While the present “zero tolerance” policy for deer and the

presence of two barrier fences are seen as the main factors to protect regeneration, there are other potential problems like hares and sporadic deer incursions that may be a threat in certain areas. New patches of regeneration will be watched for browsing and experimentation with possible solutions like bud caps and focussed stalker effort, will be undertaken as and when the opportunity arises.

- 2- *the lack of connectivity of the pinewood stands*- BEETLE analysis (Section 5 Appendix 1) has highlighted the need for seed source planting to improve connectivity of woodland areas in the future both within the estate and with neighbouring estates. Initially an ambitious programme of work was proposed to tackle the seed source planting. However after consideration, this plan will focus on two work circles in Glen Lui initially (Figure. 6). Depending on the success of these work circles and the lessons learnt then some capacity for tackling the other work circles will be allowed for in the later phases of the plan. Best practice would dictate these planting sites are established with ground preparation and fertiliser and are protected fencing. Doing this may not be compatible with the NTS's other objectives, so again a certain amount of experimentation will be involved in the initial period to ascertain the best method(s) to achieve our goals while not overly compromising other objectives.
- 3- *the need to ensure ongoing low level regeneration recruitment throughout the woodland* - regeneration recruitment has been ongoing throughout the regeneration zone in recent years and it is hoped that this will continue albeit that it is at a low level in many areas. Long term protection of this regeneration is critical if the long term vision and "favourable condition" of the woodland is to be achieved. This protection will be achieved as described above (see section 1), through the continuation of the "zero tolerance" policy for deer and presence of two barrier fences.

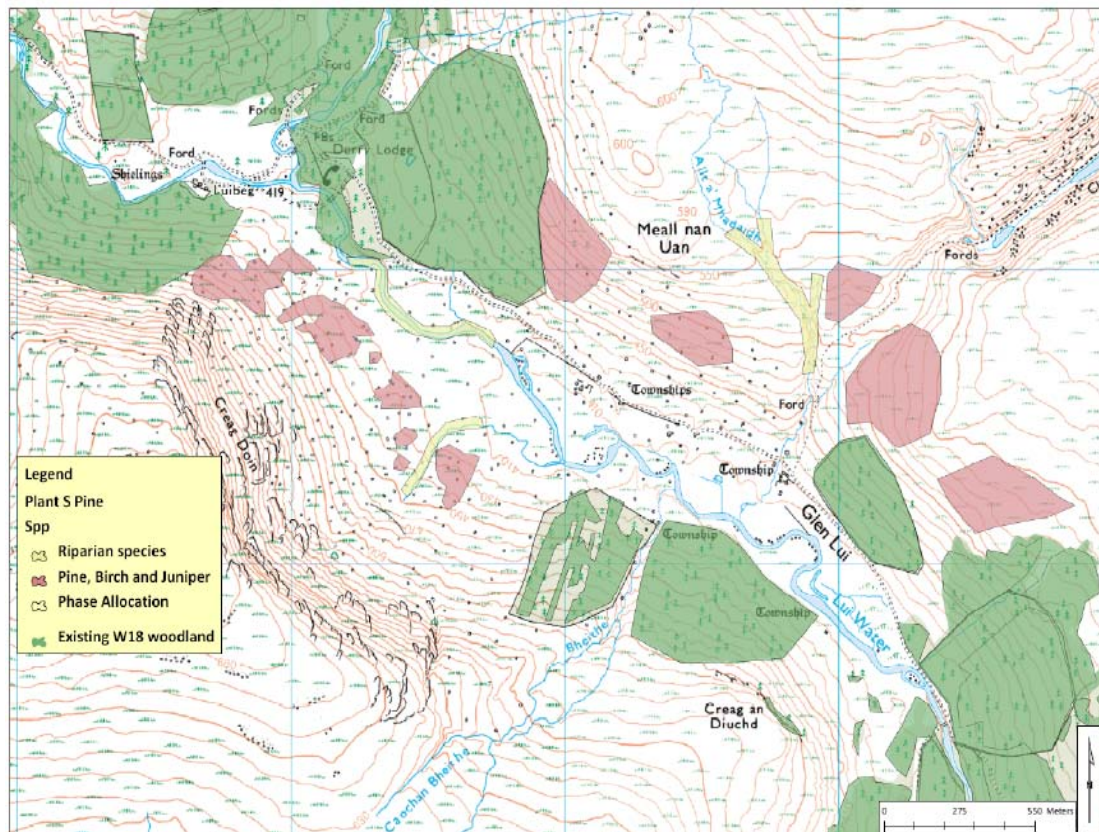


Fig. 6. More detailed view of planting areas in Lui from C Edwards 2012 (Appendix 1).

The work circles for intervention include an element of riparian woodland. However, Carol Robertson focussed specifically on riparian woodland in her work (Appendix 3) and a number of the areas she suggested for riparian woodland creation within the regeneration zone are included in the work plan of this document. Riparian areas supporting existing remnants of woodland have been identified and it has been suggested where these remnants could be supplemented through enrichment planting. NTS would prefer to achieve this riparian woodland creation without fencing as many of these areas are further out into the estate in more remote locations of high landscape and wild land quality. With the low deer presence within the regeneration zone it is also felt that establishing trees without fencing may be possible and definitely worth trying. Various establishment strategies have been proposed and these will be trialled in the absence of fencing and in areas of low deer use. These include mob planting, use of brash mats, mixing palatable and unpalatable species and exploiting potential nurse species. A period of experimentation with these establishment strategies will take place during the initial 5 year period of the plan. This period of experimentation will determine whether riparian woodland can be established in the regeneration zone through planting without the use of fencing. Target survival rates and levels of browsing damage will need to be identified prior to the trials being carried out such that an assessment can be made as to whether the establishment strategy can be deemed as successful or whether another method of establishment needs to be considered. The riparian woodland element of this plan is the area most likely to be affected by the pre-history and scheduled archaeology. The areas where riparian woodland is to be established are the same areas where pre-history archaeology is possible. The

importance of establishing some form of predictive analysis of the river bluffs and dry mounds for pre-history archaeology is therefore key to our fulfilling the work programme part of the plan.

B:5 Plantations

The plantations within the regeneration zone were established for a variety of reasons. Since 1995, NTS has recognised their potential value for biodiversity, shelter for deer and economically. However, in 1995 NTS was also aware of their detrimental impact on wild land, landscape and birds through fence strikes. To that end the 1960's & 70's plantations have been managed by the NTS in a programme of "naturalisation" works to remove unwanted non-natives, remove redundant fences, re-shape edges and re-structure the stand by variable thinning. More recent work includes deadwood creation by ring barking. NTS would still like to remove wood from the plantations where this is viable economically and particularly because the use of wood as a biomass fuel is currently being explored. In the pinewood context, the plantations, with 40-50 year old trees, are now seen as a potential addition to the stand structure of the woodland to compensate for the lack of a suitable natural alternative.

Recognising the factors mentioned above, Colin Edward's (Section 6 Appendix 1) has recommended using patch felling, crown thinning and non thinning within the plantations to produce a more heterogeneous stand structure which would mimic better a natural situation. For those areas where extraction is not an option, some thinning will be carried out through ring barking rather than felling. This will add structural diversity in the long term to the plantation and also create standing dead wood, an important habitat for conservation. Thinning through ring-barking will probably have to be done more slowly over a longer period of time. Through consultation with the Head stalker some management will be carried out in selected plantations to facilitate deer control and deer extraction. Work will be carried out in the plantations on a cyclical basis and it is envisaged that all plantations will have had some work completed within the first five years of the plan.

Based on Colin's recommendations a thinning programme for the plantations was developed and submitted as the Long Term Forest Plan (LTFP) (Appendix 6).

To date non-native tree species have been removed from plantations in the regeneration zone with the exception of European larch. A decision was made to leave this species primarily due to its value as a food resource for a number of pinewood species (black grouse, crossbill and red squirrel). Larch is also growing in some inaccessible areas where it is impractical to remove it. For the lifetime of this plan larch will slowly be reduced within the plantations through the ongoing phased thinning works that will be carried out. Its value to a number of species is still recognised and hence there is no desire to remove larch completely within a short time scale.

Landscaping design-still to get this bit. Alison not able to look at it before May.

Some of the younger plantations and those set up as enclosure experiments remain fenced but NTS intend to remove most of these in the first period of the plan. Many of the fences

have reached the end of their useful life and replacement is not necessary with the current level of grazing.

B:6 Work Plan for Regeneration Zone

General information working circles

Three regeneration working circles have been identified for the pinewood regeneration and expansion work and they are a central focus for planning, ground disturbance and browse protection for at least a 10 year period. The three circles are Glen Lui, Glen Quoich and Glen Derry (Fig. 5.) and these will be worked in this sequence over the 20 year plan.

The following schedule will be applied to each working circle:

Year 1 - detailed site planning, walking area to identify site constraints, access points for machines, habitats or soil types to avoid disturbing, new constraints not previously identified and most suitable disturbance types for the vegetation type/soil present.

Years 2 - 6 - actual site working, site disturbance timed to avoid nesting periods and take advantage of good seed years. If there has been no or little regeneration recruitment response to the management interventions in years 2-4 then repeat disturbance can be undertaken in years 5 & 6.

Years 7 - 10 - period of intense protection and monitoring to ensure regeneration is established to above 2m height.

Lessons will be learned during the planning and intervention work of first working circle. Knowledge gained from this will then be applied to the next two working circles.

The timescales are more fluid for the riparian woodland creation and woodland creation aimed at increasing connectivity. This is due to the more experimental initial stages of the work and the uncertainty in the time required to grow on or obtain trees of a Mar Lodge or local provenance suitable for planting out.

Table 1. Regeneration zone workplan.

Year	1-5	6-10	11-15	16-20
Pinewood regeneration & expansion	<p>Survey and plan Lui work circle. Includes identifying target seedling densities.</p> <p>Phase work in areas identified for intervention within working circle in Lui.</p> <p>Trial different scarification methods.</p> <p>Trial protection methods e.g. bud caps on establishing regeneration.</p>	<p>Survey and plan Quoich work circle. Includes identifying target seedling densities.</p> <p>Phase work in identified areas in Quoich</p> <p>Protect and monitor Lui areas Reapply disturbance if required</p>	<p>Survey and plan Derry work circle. Includes identifying target seedling densities.</p> <p>Phase work in identified areas in Derry.</p> <p>Protect and monitor Lui and Quoich areas (reapply disturbance is required)</p>	<p>Survey and plan Lui work circle.</p> <p>Phase work in identified areas in Lui</p> <p>Protect and monitor Derry (reapply disturbance if required) and Quoich areas</p>
Increase connectivity	<p>Collect cones and get seed grown on. Source local provenance broadleaves.</p> <p>Establish planting, ground preparation and protection methods in Glen Lui.</p> <p>Establish target survival rates and browsing levels.</p>	<p>Review success (if unfenced) based on targets and consider other options if targets not met.</p> <p>Planting and beating up as planting material allows.</p> <p>Protect.</p>	<p>Planting and beating up as planting material allows</p> <p>Protect.</p> <p>Consider embarking on second planting scheme</p>	<p>Protect.</p>

Riparian Woodland	Source local provenance broadleaves.	Review years 1-5 success and apply to a second group of areas suggested in riparian report if there has been success measured against set targets.	Review years 1-10 success.	Identify fourth group of areas and apply.
	Trial non fencing methods in areas suggested in riparian report.		Identify third group of areas and apply.	
	Establish target survival rates and browsing levels.	If establishment unsuccessful then consider other options.		
Design Landscape/Cultural History	Produce plan for Derry Lodge Designed landscape.	Implement any actions from Derry Plan	Refine map of predicted pre history sites.	
	Identify all sites of pre history in Lui work circle.	Refine map of predicted pre history sites.		
	Produce map of predicted and confirmed pre history sites and a methodology for dealing with them.	Consider grazing regimes for SAM site.		
Plantations	Strategic planning of thinning and landscape design work.	Phased thinning and landscape design work.	Phased thinning and landscape design work.	Phased thinning and landscape design work.
	Phased thinning and landscape design work.			
Montane Scrub	Monitor development	Conduct assessment and plan any intervention if required	Monitor development or continue intervention	Monitor development

C: Moorland Zone

C:1 Description

This zone comprises the remainder of the estate out with the regeneration zone. It includes the head waters of the River Dee and most of the land up to the source of the many tributaries running into the river Dee. The zone can be subdivided into a large block to the west, managed in recent times for grouse and deer. There is almost no woodland in this area, with the exception of the odd plantation designed as deer shelter and remnant pockets of broadleaved woodland in gullies and on inaccessible crags. Moorland habitats dominate the zone. In sharp contrast the eastern part of the zone contains the Mar Lodge Policies (designed landscape), a number of plantations and areas of farmland on the Dee valley floor.

The northern part of the moorland zone form part of the main granite mass of the Cairngorms. As you move south away from the high tops the geology changes and becomes more varied. Just north of the river Dee and in the western area of the moorland zone the underlying strata is moirian rocks, mainly psammite. In the Dalvorar area of the moorland zone the underlying geology is a mixture of quartzites and schists (Gimingham 2002).

Like the regeneration zone the soils are varied but generally poor. The zone is dominated by wet heath and blanket bog NVC communities at lower altitudes. Dry heath and grassland areas do occur but these are less widespread. At higher elevations dry heath, montane heath and montane grassland communities NVC communities are present.

Some areas of the moorland zone have the potential to support trees although there is little in the way of existing woodland to provide a seed source, hence trees would have to be planted. This zone is currently managed to support a deer population that provides a sporting resource and maintains the moorland habitats in favourable condition. The density of deer throughout most of the zone is too high to allow trees to establish without the use of fencing. At present increasing the tree cover is not seen as a priority with the exception of creating areas of riparian woodland.

C:2 Nature Conservation.

The moorland zone is covered in part by a number of nature conservation designations. The designated areas form parts of the same SPA's, SAC's, SSSI's and NSA's which cover the regeneration zone and the designated areas are generally overlapping (Mar Lodge Management Plan 2011-2016). A smaller proportion of the moorland zone is covered by designations compared to the regeneration zone with the exception of the Cairngorms Massif golden eagle SPA which almost covers the zone in its entirety.

The western part of the moorland zone is dominated by moorland habitats including dry heath, wind-clipped heath, wet heath, blanket bog and grassland. As mentioned above this area is predominantly un-wooded but there is suggestion of historic woodland cover through the small and isolated remnant patches of woodland still present and the presence of pine roots in the peat in many areas. There is potential to create riparian woodland throughout this zone. This would have benefits for a number of riparian species but also

act as a wildlife corridor linking up woodland on Mar Lodge Estate with woodland on other neighbouring estates.

As most of the ground is un-designated there are not the same issues as in the regeneration zone concerning loss of one priority habitat over gain in another. There may be some loss of moorland habitats through the riparian woodland creation but it is accepted that the benefits of the woodland habitats would outweigh the moorland loss.

C:3 Archaeology-Cultural Heritage

In common with the regeneration zone, the moorland zone has been surveyed by the Royal Commission and a large number of archaeological sites were identified (Mar Lodge Management Plan 2011-2016). This again reflects the estates use by farming communities in the past. The discovery of worked flint in this zone has highlighted its potential to contain sites of pre-history which would be significant given that they have not previously been found in an upland inland location. The exploration of this potential and the identification of sites or potential pre-history sites is key to progressing riparian woodland creation in this zone. Hence it has been identified as the focus of the archaeological work over the next 5 years. The same buffer zones will be applied to upstanding archaeological sites here as are applied in the regeneration zone with the same proviso that they would be modified as knowledge increases.

There are two lodges in the zone one of which, Bynack Lodge, has some remnant trees from the landscape planting that surrounded it in the past. NTS will explore this previous landscape design and produce a plan for its future. The core designed landscape is considered as a separate section later in this plan.

C:4 Semi-Natural Woodland

The semi-natural woodland in this zone is confined to new native woodland (NNW) plantations and broadleaved remnants to be found in gullies, on islands and steep river banks. The NNW plantations will be managed to maintain their diversity until their fences are no longer viable. At this point a decision will be made as to whether deer can be given access. The growth of the trees and their corresponding height and girth at this time will be key to this decision.

There is currently a project called the Upper Dee Riparian Project (UDRP) established by the Dee District Fisheries Board and the National Park. The aim of this project is to establish riparian woodland in the upper Dee catchment with a long term goal of linking up catchments through a riparian woodland corridor. Prior to conducting the advisory work for NTS, Carol Robertson was involved in surveying riparian areas within Mar Lodge for the UDRP. In both her reports for UDRP and for NTS, she has identified areas of remnant riparian woodland that would be suitable for enrichment planting. NTS will work with the Dee District Fisheries Board (DDFB) and CNP to create some areas of riparian woodland within the zone as potential seed sources for future expansion. Consideration will be given to Carol's suggested areas as well as proposals directly from the DDFB/CNP. These will be matched against the scheduled archaeological sites, the work to be carried out on identifying pre-history sites and the needs of the estate re deer management and

movements. While having all these factors to consider makes it complex initial discussions suggest that suitable sites can be found where these factors can all be satisfied.

It is likely that some of this work will involve riparian woodland creation along the Geldie burn with a long term view to a woodland link with Glen Feshie. As deer densities here are too high to attempt planting without fencing this work will follow a more traditional route of planting and fencing. However, due consideration will be given to impacts on access, wild land, landscape and deer movements and hence the fence lines and fence types will be carefully considered and a landscape assessment completed.

There are some areas of the moorland zone where deer usage may allow woodland establishment without fencing. These areas have been identified in Carol Robertson's plan. NTS intend to trial riparian planting without fencing in these areas over the first five years of the work plan using the planting strategies outlined in the regeneration zone-semi-natural woodland section (see above).

C:5 Plantations

The overall objectives for the plantations in the moorland zone are principally the same as those for the regeneration zone (Section 6 Appendix 1). Plantations will be primarily managed through a process of patch felling, crown thinning and non-thinning. The moorland zone plantations are the only source of winter shelter for deer and therefore must also be managed in consultation with the Head stalker to maintain their value to deer in winter. Thinning plans for these plantations will have this requirement as a priority and strive to improve the quality of the woodland habitat for deer. A few of the plantations still contain non-native tree species (Norway spruce, lodgepole pine & larch). These will slowly be removed from the plantations in preference to Scots pine, during the thinning phases where this will not impact on the quality of the habitat for deer shelter.

Many of the plantations within the eastern block of the moorland zone fall into the designed landscape, particular those plantations around the Linn of Dee and within the Mar Lodge policies. Many of these plantations have been historically made to be a bit more special and stand out from the rest of the landscape by the planting of "exotic " species, even if exotic here means Norway Spruce and Larch. The designed landscape plan requires completion before a plan for these plantations can be developed.

Table 2. Work Plan for Moorland Zone

Year	1-5	6-10	11-15	16-20
Riparian Woodland	<p>Discuss riparian proposals from Dee Fisheries Board and finalise for Life funding bid or SRDP route</p> <p>Depending on funding success of the UDRP potential establish planting enclosures up the Geldie burn</p> <p>Trial non fencing methods in areas where the grazing pressure might be lower e.g. Area 1 in Carol's report, gorges and steep burn sides. Set targets for survival rates, browsing levels.</p>	<p>If required complete with UDRP enclosure establishment up Geldie burn</p> <p>Review years 1-5 success and apply to second area suggested in riparian report and second group of trial areas if successful when measured against targets. If not successful need to consider other options.</p>	<p>Identify third group of areas and apply.</p>	<p>Identify fourth group of areas and apply.</p>
Design Landscape/Cultural History	<p>Identify all sites of pre-history in suggested riparian planting areas above.</p> <p>Produce map of predicted and confirmed pre history sites and a methodology for dealing with them.</p>	<p>Produce plan for Bynack designed Landscape.</p> <p>Refine map of predicted pre history sites.</p>	<p>Refine map of predicted pre history sites.</p>	
Plantations	<p>Planning of thinning and landscape design work.</p> <p>Phased thinning and landscape design work.</p>	<p>Phased thinning and landscape design work.</p>	<p>Phased thinning and landscape design work.</p>	<p>Phased thinning and landscape design work.</p>

D: Core Designed Landscape

To follow

Table 3. Work Plan for Designed Landscape

E: General

E:1 Working practices

NTS is a conservation organisation with multiple objectives for Mar Lodge Estate and guided by a set of management principles and NTS policies. This influences the type of activities and working practices that NTS is willing to undertake across the estate. There is recognition that some methods of work while having benefit to one interest may compromise another in either the short or long term. After due consideration the following table lays out the NTS's position on the working methods it intends to employ to achieve the work outlined in this document.

Table 4. Working practices

Activity	Regeneration Zone	Moorland Zone	Designed Landscape
Deer Management	Continue to apply the “zero tolerance” approach in the regeneration zone. Focussed control to protect newly regenerated and planted areas. Discuss designing plantation work to facilitate deer management.	Maintain deer population around 1650.	Individual protection the most likely method employed
Intervention - removal of vegetation layer	Methods will be trialled. Preference for cutting and either removing or leaving material on site. Burning considered too risky near to the mature woodland.	Not applicable	
Intervention - Scarification	Experiment with various techniques to ensure least intrusive but still effective method used for each site conditions.	Not applicable	Not applicable

Planting (includes riparian planting)	Planting undertaken when need for potential seed source for future identified. Native origin seed source if possible or local provenance.	Native origin seed source if possible or local provenance.	Planting of “Exotics” and native trees with individual protection.
	Experimentation for riparian planting with mob planting, brash mats and protection from less palatable species. Small exclosures of “deer will not jump in” size.	Riparian planting as for regen zone but larger fenced enclosures likely in the Geldie burn as part of UDRP	
Ground preparation	Some ground preparation essential and depending on site conditions this will range from spade/ mattock screefing to spot cultivator. Mounding or ploughing not permitted.	As per Regen zone Mounding or ploughing not permitted.	All hand tool operation
Fertiliser	Fertiliser application required. Examine mycorrhizal inoculation of trees prior to planting	Fertiliser application required.	
Fencing	Fencing of planting (including riparian) sites seen as last resort but may be necessary in some situations. Off-set fencing would be the method of choice.	Fencing required for enclosures up the Geldie burn (UDRP). Fence types will be explored but full deer fencing likely. New barrier fence at Linn of Dee as per IRP report.	Stock and deer as required. Possibility of wooden stock fencing being authentic in policies.

Fence removal	Fencing of experimental riparian planting seen as last resort but may be necessary if unable to succeed without fencing.		
	Desire to reduce deer fencing over time. Older plantation fences will be removed.	Completed on all suitable plantations. Remainder to be removed when trees no longer vulnerable.	Not likely in period of plan
Thinning	Plantations to undergo restructuring with aim to make them more heterogeneous. This will be done by a mix of patch felling and crown thinning and non-thinning. Incorporating ring barking as an option when extraction not required. Edges of plantations to be adjusted by variable thinning where landscape design suggests this. Use of produce for biomass and other commercial purposes when this is practical.	As for regen zone	Dictated by needs of landscape design.

E:2 Fire Plan

A fire plan is to be produced for the estate as a standalone document.

E:3 Monitoring

A monitoring programme will be put in place to monitor the success of the intervention work in seedling establishment and survival . This will involve plot based sampling to record seedling species density, seedling height and level of browsing damage. Monitoring will also be established to record the success of the riparian planting trials and the seed source planting in Glen Lui if this goes ahead un-fenced. Target density and species values will need to be identified prior to monitoring so that the results can be compared with an expected outcome and if necessary management input can be changed to meet the desired targets.

F: Work timeline and Costings

G: List of Figure, Tables, References & Appendices

G:1 Figures

Figure. 1. Map showing the regeneration and moorland zones

Figure. 2. Mar Lodge current woodland extent

Figure 3.Mar Lodge Regeneration Plan: amalgamated constraints areas - no disturbance

Figure 4. Suitability map for expansion of NVC W18 from C. Edwards 2009

Figure 5. Location of work circles and proximity to existing natural regeneration from C. Edwards 2012

Figure 6. Detailed view of planting areas in Glen Lui.

G:2 Tables

Table. 1. Work plan for the regeneration zone

Table. 2. Work plan for the moorland zone

Table. 3. Work plan for the designed landscape

Table . 4. Working practices.

G:3 Appendices

Appendix 1. Regeneration Management Plan for Mar Lodge Estate woodlands. Jan 2012. C. Edwards.

Appendix 2. Developing a Regeneration Management Plan for Mar Lodge Estate native woodlands: 2010-2030. Dec 2009. C. Edwards.

Appendix 3. Mar Lodge Estate Braemar, Forest Plan, Riparian Woodland. Oct 2011. C. Robertson.

Appendix 4. Designations Table.

Appendix 5. Monitoring in the native pinewoods at Mar Lodge; baseline Stand Structure Survey. 2010. C. Edwards & O. Davies.
Appendix 6. Long term forest plan - Mar Lodge 2012.

G:4 References

Mar Lodge Management Plan 2011-2016, NTS.
The Ecology, Land Use and Conservation of the Cairngorms (2002) C. Gimingham (ed.).
<http://en.wikipedia.org/wiki/Braemar> - climate data for Braemar.
Mar Lodge Section 7 Agreement (2010)
NTS Wild Land Policy (2002)
NTS Access & Enjoyment Principles (2005)
NTS Conservation Principles (2003)
NTS Deer Management Policy (2003)
NTS Landscape Policy (2005)
NTS Environmental Policy (2004)
Mar Lodge Independent Review Panel Report (Nov 2011)
Mar Lodge Estate Woodland History Project (2001), U. Urquhart, E. Martin & G. Ewen.
The Native Pinewoods of Scotland (1959) H.M. Steven & A. Carlisle.
Assessment of regeneration enclosures on Mar Lodge Estate (Sept 2000). Ross Partnership.
Upper Dee Riparian Woodland Opportunities for enhancement in the Cairngorms National Park - a discussion paper. (July 2009). C. Robertson.
British Plant Communities. Volume 1. [Woodlands and scrub](#). (1991) Cambridge University Press. J.S. Rodwell (ed.)



the National Trust
for Scotland
a place for everyone

II

Mar Lodge Estate

Moorland Management Plan 2012

Introduction

The Mar Lodge Estate Management Plan 2012 – 2016 outlines the need for a fully integrated moorland management plan covering the whole estate. Previous moorland plans have concentrated on single beats, with limited objectives. They have been written in a piecemeal fashion in response to specific issues.

The lack of an all encompassing moorland plan was highlighted by the Mar Lodge Estate Independent Review Panel as being a major detractor/omission to the management of the estate as a whole.

NTS has therefore undertaken to develop a moorland management plan by the end of the 2012/13 financial year. This is a significant undertaking, given the amount of work to be carried out in terms of surveys and mapping required to inform the plan. In addition, the management team will need to consider carefully many complex issues which have in the past been difficult to resolve. A Gantt chart outlining the project process for delivering the plan is attached.

Key to the success of the plan will be ensuring that clear and unambiguous objectives are defined for every area of moorland on the estate. Achieving this has been difficult in the past, but a greater clarity of purpose now exists and these issues will be tackled, and appropriate management measures implemented.

The moorland management plan will specifically include and address the following issues:

1. Description of the conservation and sporting interests, past and present
2. A moorland habitat condition assessment for the whole estate
3. Specific objectives for each beat on the estate, and parts thereof
4. Detailed description of how these objectives will be achieved, to include:
 - a. A muirburn plan
 - b. Other forms of heather management e.g. cutting
 - c. A full assessment of herbivore impact, and the required management regime resulting from this
 - d. An assessment of the need for, and methods of predator control
 - e. An agreed policy for ATV use
 - f. A grouse management strategy
 - g. A detailed fire risk assessment with control measures identified

In addition to the issues specifically covered in the moorland plan there will be an implicit need to integrate the moorland plan with the Deer Management Plan, the Whole Estate Forest Plan and the

Visitor Management Plan. Together, these four key documents will underpin the Mar Lodge Estate Management Plan 2012 – 16.



the National Trust
for Scotland
a place for everyone

III Mar Lodge Estate Visitor Management Plan 2012

Introduction

During 2011, the Mar Lodge Estate team undertook to re-write the Visitor Management Plan (VMP) for the Estate. The previous VMP had been written in 1999 but had never formally been adopted by NTS. Although many of the actions contained within it had been achieved, there was no clear timetable for delivery.

During 2011, the plan has since been re-written and is now considered to be in draft. However, while the current document provides a solid strategic framework, it does not set out a mechanism for delivery, much less a timetable. The VMP by its very nature covers a wide range of subject areas and it has become clear during the redrafting that it is simply not possible to achieve everything immediately. The plan will need to be prioritised and delivery timescales established. While the VMP covers many ongoing day to day management activities such as ranger patrols, it also considers large scale projects, such as the refurbishment and future use of Derry Lodge, a major project in itself.

For this reason, it has been decided that while progressing the ongoing management activities contained within the plan, it will be necessary to reconsider the approach to the overall plan. It is also clear that the resource is not available on the estate to adequately tackle the VMP in the level of detail necessary to provide a workable plan. We therefore propose to appoint consultants to assist in redrafting the plan.

A consultant brief will be prepared during July 2012 with the aim to tender the work through the summer and appoint by early autumn 2012.

In addition to assessing and prioritising the actions and objectives contained within the current document, the brief will include:

1. Development of an extended "Commercial Management Plan" introducing the business rationale for prioritising actions within the VMP
2. A schedule and options assessment for potential investment (capital & management) resources
3. A business proposition with income (reserve, grant, appeal, partner) & spend scenarios
4. An indication of the return on investment in commercial terms

Meanwhile, the existing strategic draft plan is attached for reference, and will continue to be used as a guide as to what we are doing now, and to indicate a "direction of travel."

The VMP is one of the four key plans underpinning the main Mar Lodge Estate Management Plan 2012- 2016.



MAR LODGE ESTATE

VISITOR MANAGEMENT PLAN

2011 - 2016

INTERNAL DRAFT

CONTENTS

1. INTRODUCTION

1.1 General Management of the Estate

1.2 Vision for Visitor Management

2. THE VISITOR

2.1 Visitor Profile

2.2 Significance of Mar Lodge Estate to the Visitor

2.3 Existing Infrastructure

2.3.1 Roads & Tracks

2.3.2 Car Parks

2.3.3 Footpaths

2.3.4 Buildings

2.3.5 Other Structures

2.3.6 Education / Information / Interpretation

3. GENERAL APPROACH & GUIDING PRINCIPLES

3.1 General Approach

3.2 Management Framework

3.2.1 Primary Aim of Visitor Management

3.2.2 Statutory Obligations

3.2.3 Trust Policies

3.2.4 Wild Land Policy (and Unna Principles)

Designations

3.3 Balancing Access and Conservation

3.4 Social and Economic Context

3.4.1 Local Communities

3.4.2 Wider Cairngorms and National Interest

3.5 Management Zones

3.5.1 The Wider Estate

3.5.2 The Designed Landscape Zone, including buildings in constant use

3.5.3 The Intermediate Zone, including Lower Glens

4. OBJECTIVES AND ACTIONS

4.1 Visitor Welcome

- 4.1.1 Pre-Arrival (Marketing)
- 4.1.2 Orientation
- 4.1.3 Reception

4.2 Visitor Facilities

- 4.2.1 Traffic Management
- 4.2.2 Buildings
- 4.2.3 Future Development Plans / Provision of Access Facilities
- 4.2.4 Outdoor Recreation / Wild Land Management

Education and Interpretation

4.3 Partnership and Liaison

4.4 Staffing and Resources

5 MONITORING AND FEEDBACK

5.1 Further Survey

5.2 Monitoring

5.3 Evaluation

6 ORGANISATION

6.1 WORKPLAN

1. INTRODUCTION

1.1 GENERAL MANAGEMENT OF THE ESTATE

Mar Lodge Estate was acquired by the National Trust for Scotland in June 1995 in recognition of its outstanding importance for nature conservation, and its existence as a large area of some of the most remote, wild and scenic parts of Scotland with a high profile in the psyche of the nation. It is, most significantly in area, a wild, open landscape regarded with respect and affection by walkers and climbers who visit it in significant numbers. The property is approached by vehicle from the village of Braemar along a single no-through road, which skirts the southern edge of the Estate, dictating a pattern of access which also encourages sight-seeing and short walks for the majority, along the riversides and lower glens. It is also a working sporting estate, where field sports play an important role in management. The Estate also contains a number of buildings, some listed, most notably the Victorian mansionhouse and former shooting lodge of the Duke of Fife, Mar Lodge itself. The buildings have the potential to provide an important strategic and commercial element in the provision of facilities for visitors. Its proximity to Braemar ensures it has an important part to play in the local tourism economy. Finally, at nearly 30,000 hectares in size, it occupies a very central and significant position within the core of the Cairngorms National Park and must be managed as an integral part of this.

(A more detailed description of the Estate and its features is contained in the Property Management Plan – available as a download from the NTS website – www.nts.org.uk)

Purchase of the Estate was enabled through a substantial donation from the Easter Charitable Trust, and work funded in part by a large endowment from the Heritage Lottery Fund. A Management Agreement also exists between the NTS and Scottish Natural Heritage, another major funding partner. In 2006, to reflect legislative change, all parties confirmed the purposes of management in a set of 'Management Principles'. The preface to these declares the overall aim as: *"The Principal aim of the NTS shall be to manage the Estate in a sustainable manner for the benefit of the nation, ensuring the continuing conservation and restoration of its internationally important geology, flora, fauna, wild land quality, and archaeological value."*

The guiding framework for the integrated management of Mar Lodge Estate as a whole is provided by the Property Management Plan [2006 – 2011] (Currently under quinquennial review, a fourth edition in preparation, by February 2012).

The purpose of the Visitor Management Plan is to provide a framework for access, and the provision of facilities, information, interpretation and education, achieved in an integrated manner.

1.2 VISION FOR VISITOR MANAGEMENT

VISION STATEMENT

The vision for Visitor Management at Mar Lodge is to provide memorable visitor experiences reflecting the special qualities of the Estate, and to interpret those special qualities, in a sustainable way, helping to conserve and enhance those resources for future generations.

Such experiences will provide not only visitor enjoyment, but also increase awareness and understanding, thereby enhancing appreciation. An exciting opportunity exists to cater for a wide range of visitors and activities, in a way that is successfully integrated with other management aims. Visitor management therefore becomes a useful tool in the holistic management of the property, and should engender support for the Trust and its work.

The key to sustainability requires an approach to management that embraces human and social values in harmony with the environment, and offers support to the wider communities and stakeholder interests.

2. THE VISITOR

2.1 VISITOR PROFILE

Some quantitative data on visitors has been collated since 1997. The Mar Lodge Ranger Service has recorded numbers of vehicles arriving at the Linn of Dee, and pedestrians at strategic points within the wider Estate through a system of automatic counters.

Observation has shown that the great majority of visitors arrive at the Estate by car, with coach tours (mainly parties staying locally in the two major Braemar Hotels) making up a small percentage of visitors, principally to the Linn of Dee during the summer season. Otherwise, public transport is very limited, absent beyond the village of Braemar, and provides for a very small number of visitors. A very small percentage arrive by bicycle (as opposed to those arriving with a bicycle carried on a vehicle, to use upon arrival at this location. About 6% of vehicles carry bicycles.)

Analysis of the data available for the Linn of Dee, based on an average calibration

factor of 2.4 occupants per vehicle, gives an indicative annual total of visitors arriving at this point by vehicle to be in the range:

Min: 80,000 Max: 105,000.

The majority of these visits take place during the summer month, with August as the peak. 'Visit Scotland' recorded 24694 visitors to the Braemar Information Centre during 2010. Obviously, not all visitors to the Estate stop at the Visitor Information Centre - most likely these are repeat visitors who already have a clear intention of their destination. Equally, not all customers to the VIC will visit the Estate. From a reliable survey carried out in the East Grampians and Lochnagar area in 1995, it is reasonable to extrapolate that a significant proportion of visits are in the form of day visits made by residents in Grampian and Tayside Regions, many of whom are repeat visitors. Other data from 'Visit Scotland' estimates that overseas tourists represent approximately 18% of visitors to the region.

Visits to the 'Outdoors'

It is possible to distinguish outdoor visitors between those visiting the 'low ground' or 'high ground'; or alternatively as 'short stay' or 'long stay'. A more detailed assessment is provided by the use of categories broadly defined in the management guide 'Management For People' (SNH publication, 2004) Mar Lodge Estate featured as a pilot property during the production of this manual). These categories group visitors according to aspirations and expectations into four main 'types':

'Site-seers' | 'Saunterers/Strollers' | 'Activity Seekers' | 'Wilderness Seekers'.

(Fuller description in Appendix – Table 1)

These distinctions are not discrete, but later within the body of this plan, visitor management zones are identified which reflect the movements of these types of group upon reaching the Estate, and influence the provision of facilities in each of those zones. The proportion of high ground or 'mountain' visitors to low ground is higher during the winter months.

Data indicates that between 20% and 25% of the total numbers arriving in the area of Linn of Dee and Linn of Quoich (Activity / Wilderness Seekers by category) venture into the core area of the Cairngorms. This is borne out by the last major survey of recreational mountain users of the Cairngorm area - the 'Cairngorm Mountain Recreation Survey' (Centre for Leisure Research / SNH and local partners, 1999) examined behaviour and attitudes of 'mountain' visitors (by definition, adults spending more than one hour taking part in a recreational activity, beyond the public road) to the Cairngorm Area.

The survey estimates the total number of mountain users to the Cairngorm Mountains over the survey period (Sept 1997 - Aug. 1998) to be 123,000. Of these, 23% gained access via the Linn of Dee and 9% via the Linn of Quoich

(second and third most popular access points), both on Mar Lodge Estate. Walking was found to be the main activity (83%). Almost all, (94%) got to the start of their trip by car. Almost nine out of ten (88%) had visited the Cairngorms before, 56% lived in Scotland, and 15% were members of the National Trust for Scotland. The annual vehicle counts carried out by the Estate since 1999 at Linn of Dee suggest no significant change to this pattern up to the present day.

Eighty seven percent completed their trip in one day, the rest spending at least one night in the mountains. Almost a half, (46%) of those spending a night out had accessed from the Linn of Dee.

Five per cent indicated mountain biking as an additional activity; Linn of Dee to Derry Lodge was quoted as the most frequently cycled track, with an estimated 5000 to 7000 passes per year on this route.

Almost all found their visit enjoyable, landscape and scenery (50%) and peace / quiet / remoteness (23%) the aspects most enjoyed.

Also explored by this survey were attitudinal responses to: activities undertaken by other users; landscape features; and access issues; and will continue to be a valuable guide in the production and implementation of this plan. Eighty one per cent of responders agreed that evidence exists of serious localised damage as a result of visitor numbers, and 64% thought this would get worse, emphasising support for responsible behaviour. Taking action by reducing visitor numbers, however, received a general lack of support, 71% objecting to this.

Walking is the main activity currently undertaken by visitors to the Estate. The walks range from hill walks to the Munros and high tops of the wider Estate; walks along tracks and in glens; and walks along the riverside and within the Designed Landscape in the environs of the Lodge building. For the majority of visitors, the experience is that of the landscape and scenery, of wildlife, and of quiet enjoyment. Specific recreational activities are recognised to take place on the Estate, and are discussed within Appendix 3.

A more recent visitor survey produced for the National Park area (*Cairngorms National Park Visitor Survey – August 2010 – CELLOmruk research*) interviewed a broader spectrum of visitors to a much wider area of the Park (Ballater and Braemar village were among chosen interview locations), and perhaps better reflects the patterns of 'site-seers' and 'saunterers / strollers' who visit the Estate.

A summary of findings from this report suggests:

The most common 'group' size consists of two people. (49%)

62% of visitors came from Scotland – a significant proportion of these (up to a third?*) *make footnote on survey bias?* resident within the Park area.

18% came from overseas (matching Visit Scotland data).

Average spend per person / per day during their stay was £11.14.
Over half of respondents said they would be spending at least one night away from their place of residence; 35% of these staying for between 1 and 4 nights and another 34% staying between 5 and 7 nights.
Self-catering is the second most popular type of accommodation booked.
'General sightseeing' was quoted as the most common activity (72%); and 37% said they would be undertaking "some form of high or low level walking".
Scenery; peace and quiet; open space; wildlife; "friendly people"; "like the area"; and "visiting friends and family"; were also quoted as reasons for visiting, or what people "most liked" about the National Park.
"Visiting attractions" (castles / museums etc. rather than natural features); "eating out"; skiing (seasonal); and "taking photographs"; were also mentioned among activities people take part in.
Braemar was listed as the second most visited settlement (29%).
Just over two fifths (43%) of all visitors said that "nothing at all could have been improved" to make their visit more enjoyable.
12% were members of the National Trust for Scotland or National Trust (not distinguished).

Visits to accommodation or facilities

'Formal' visitors to the Estate include guests staying in the Lodge self-catering apartments; family gatherings; sporting clients; educational groups and others on conducted site visits; and research workers.

Deerstalking is let to clients who are accompanied to the hill by the Estate's own stalking team. In an average year, approximately 200 'rifle days' are let, equating to about one hundred guests.

Walked up grouse shooting also takes place between August and December, on about 25 days, at an average 6 guns per day.

Salmon fishing is offered on a total ofbeats on the River Dee, currently advertised and let through the Deeside wide 'Fishdee' website.

(Check with Chris)

The self-catering apartments of Mar Lodge accommodate a maximum of 38 visitors per week, available for 52 weeks of the year. The 'Connoisseur' properties (leased to the Trust by arrangement) offer an additional 18 self-catering berths, available for a minimum of nine months of the year. Questionnaire returns from guests staying in the apartments confirm that all guests spend at least some of their stay on the Estate, expressing hillwalking and sightseeing as their main activities. More recently, the Estate has seen an increase in use of the Lodge as a 'function' venue, principally wedding parties.

The Basecamp, situated in the Stable Block, offers less luxurious, but nevertheless comfortable and well-equipped accommodation for up to 12, also all year round. This facility lends itself well to group use, and is sometimes used by hillwalking clubs, educational groups, and also as an 'overspill' for large groups accommodated in the main Lodge, such as weddings. The basecamp also provides a venue for residential work camps or other volunteers assisting with practical work throughout the year.

A varying number of non-residential groups visit the Estate each year, to be accompanied on a site visit by members of staff. Group size varies between 10 and 50, the average annual total of people involved approximately 500. Subjects vary from general interest, to specific management issues. Roughly one-third of these are educational groups from formal educational establishments, ranging from local primary schools to Universities.

Land management students, volunteers, and research groups are also accommodated on the Estate on an occasional basis.

Although there is open access to visitors in the area of the Estate around the main buildings of the Lodge and Stables, the buildings themselves are not open to the public on a daily basis. As an exception to this, the Estate hosts two or three 'Open Days' per year, a number of 'community events', and a programme of guided walks led principally by the Ranger Service.

2.2 SIGNIFICANCE OF MAR LODGE ESTATE TO THE VISITOR

Mar Lodge Estate is able to provide a range of experiences for visitors in a variety of landscapes and hence visitors may arrive with a differing range of expectations.

At 29,000 hectares, the property occupies a strategically important position at the heart of the Cairngorms National Park (just under 7% of the total Park area)

A key feature of the property is its size and consequently large and significant area of remote, wild landscapes. This is of national and international importance to specialist users of the most remote areas of the high tops and plateau (which includes summer and winter climbing and ski-touring); whilst the lower glens and managed areas are locally and regionally significant in providing a 'sample' wild land experience for the majority, who may view the higher mountains from a distance.

Mar Lodge Estate is not only the end point of the road access on Upper Deeside, but also an important gateway for visitors seeking the "Cairngorm Experience" whether at low level or on the high tops. Visitors to the high tops are seeking an

environment that values wildness, a challenging experience, solitude, remoteness and an absence of human artefacts. Walking (and associated activities such as mountaineering, climbing and camping) is clearly the most popular outdoor activity undertaken on the Estate. A study conducted by Scottish Natural Heritage (*Assessing the Economic Impacts of Nature Based Tourism in Scotland*) estimates the annual value to the Scottish economy of walking tourism at £533 million.

The same SNH study puts the value of tourists “touring and enjoying Scotland’s landscapes and scenery” at £420 million per year.

The area is rich in cultural history. As a part of Deeside, many visitors come to Braemar because of the royal connection, following the Victorian Heritage Trail, which includes the Linn of Dee. These visitors often arrive by coach. In the glens the ruined townships and shielings provide a poignant reminder of how people must have scratched a precarious living from the land. In outlying areas there are the remains of the 19th Century sporting estate in the derelict and ruined lodges.

Many visitors come because of their interest in the natural environment.

The Cairngorms are of international significance for geology and geomorphology, characterised by its landscape form, and for its wildlife.

Remnant Caledonian Pinewood is found in the glens. This type of woodland is considered one of the least altered by man's influence. It has a special place in the minds of many, with strong romantic links to Scotland's past.

[*"To stand in them is to feel the past"....(Steven and Carlisle, 1957)*]

Native Caledonian woodland contains special plants such as twinflower; birds such as Scottish crossbill and capercaillie and animals such as red squirrel. On the edge of the forests can be seen red deer, black grouse, and birds of prey including the iconic golden eagle.

The moorland zone contains large areas of heather moor, a relatively common sight in Scotland as a whole, but globally significant as a recognised habitat, occurring only in northern latitudes of the world. These areas of the Estate provide ample ground for the pursuit of Field Sports – deer stalking and grouse shooting.

The Estate also encompasses the headwaters of the River Dee, one of Scotland’s finest salmon rivers.

The montane plateau is on a massive scale – the largest such area in Britain. It is a challenging landscape for visitors, especially in severe weather, and, given its distance from roads and access points, it evokes a real sense of achievement for those reaching it. It is one of the areas least influenced by man in the British Isles. Of great significance is the arctic-alpine flora, rare lower plant communities, and important populations of ptarmigan, dotterel and snow bunting.

It should be possible to enhance the experience for many visitors through the provision of appropriate facilities – decisions on development should be based on suitability and sustainability, guided by the ‘zoned’ approach to visitor

management.

Such provision should seek to promote Mar Lodge as an exemplar of best practice in the implementation of the Trust's 'Wild Land Policy'. There is further potential to heighten feelings of solitude and 'naturalness' in remoter areas, through proactive work in leading-edge footpath maintenance, fence and track removal, and woodland & plantation restructuring.

The Estate is capable of supporting a diversity of economic activity based on field sports, informal recreation and tourism, helping to provide an important contribution to the local economy, and the upkeep of the Estate itself. The development of associated facilities and activities in the 'Designed Landscape' or 'managed' zone should be made through a decision process accompanied by a sound business case. Investment in such facilities can continue to provide employment, and help to sustain the relationship between the Estate and the local community.

2.3 EXISTING INFRASTRUCTURE

2.3.1 ROADS and TRACKS

Vehicular access to the Estate is entirely from the south and east via the A93 to Braemar. From Braemar, a narrow unclassified road gives access to Inverey and the Linn of Dee (6 miles) and beyond, turning eastward along the north side of the Dee, as far as the Linn of Quoich (10 miles). There is no public vehicular access beyond these points. Visitors to the Estate office, and facilities in the Lodge and Stable Block, enter the Estate across a narrow Victorian bridge (a listed structure), three miles from Braemar, carrying a weight limit of 8 tonnes. Heavy or long vehicles (including coaches) are required to access the Estate buildings via the Linn of Dee and along the West Drive to the Lodge (8 miles from Braemar).

From the public road, there are a number of gated, predominately linear vehicle tracks extending along the main glens into the Estate. The main routes are Linn of Dee to Derry Lodge; Linn of Quoich to the foot of Beinn à Bhuird; and Linn of Dee to White Bridge and Geldie Lodge. These tracks are in daily use by Trust vehicles undertaking management work, principally for field sports, forestry, access management and ecological monitoring & research, otherwise vehicle access is kept to a minimum of essential or emergency use. The tracks continue to provide good pedestrian, bicycle and pony access to the core of the Estate.

Beyond these limits, in accordance with the Estate's management aims to reduce vehicular access to remoter areas of the Cairngorms and the Trust's Wild Land policy, and made possible by substantial grants from Scottish Natural Heritage and the European Agriculture Guidance and Guarantee Fund (EAGGF), the Estate

embarked on an ambitious programme of track removal during the first ten years of management. In all, a total of 35 kilometres of previously constructed track have been removed, re-landscaped and reduced to footpath width. This work included the removal of the six and a half kilometres of bulldozed track which led close to the summit of Beinn à Bhuird (originally built in connection with a prospective skiing and sporting development planned by the Panchaud brothers who owned the Estate from 1963-1987, and later abandoned), widely recognised at the time as one of the most visible scars on the mountain landscape of the Cairngorms. The Trust has since received many plaudits in recognition of this work.

2.3.2 CAR PARKS

The only formal car park on the Estate is at the Linn of Dee. This has a capacity for up to 95 cars and three coaches at one time and was originally constructed (in 1990/91) as a joint venture between Countryside Commission for Scotland, Kincardine and Deeside District Council and the previous Estate owner. Prior to this there had been uncontrolled parking on the roadsides and in the trees. During 2002, agreement was reached to transfer ownership of the car park to NTS from Aberdeenshire Council, enabling the Trust to undertake a programme of improvements which included 'de-urbanising' through the removal of concrete kerbs; dedicated parking for disabled visitors; installation of composting toilet block; provision of on-site information and interpretation. At the same time, a parking charge was introduced (free to NTS members), complete with solar powered ticketing machines – the income generated being used for further access and management improvements on the Estate.

A traffic counter installed at the entrance to the car park indicates upwards of 80,000 visitors per annum, with a noticeable seasonal bias toward the summer months. Visitors arrive at this spot with widely different aspirations – from 'wilderness seekers' heading for multi-day trips in the mountains; full or half-day walks in the woodlands and glens; 'strollers' and picnickers; to coach tours enjoying a 15 minute stop to take in the beauty spot of the waterfall at the Linn itself. A Mountain Recreation Survey in 1999* found that roughly 25% of visitors entering the Cairngorm glens and mountain do so via the Linn of Dee. A separate coach turning area at the bridge, 100m west of car park, has been designated to cater specifically for short-stay coach parties.

At the Linn of Quoich, parking is much less formal. Access to this area is across a wooden bridge, which is not part of the public highway and the responsibility for its maintenance lies with the Estate. Parking is effectively contained by a combination of natural barriers; agricultural fences and roadside boulders (giving protection to the site of an old mill, designated as a Scheduled Ancient Monument [SAM]). An interpretive panel, information board and leaflet dispenser are present, but no other facilities. There is currently no charge made for parking. Since 2009,

owing to the poor structural condition of the bridge, parking has been restricted to a small quarry area, and seasonal overspill, about 50 metres to the west of the bridge. Vehicle numbers average between 10 – 20 at any one time most weekends, and the summer maximum around 45. Visitors to the Quoich come either to 'picnic'; visit the beauty spot of the Linn and Punchbowl (300 metres upstream); take short or long walks into the Glen; or access the eastern summits of the Cairngorm range. Some informal camping also takes place, which can lead to behavioural issues of litter, fires and human waste.

Roadside parking occurs in a few locations, either as a result of overspill at peak times, such as at the entrance to Linn of Dee car park and bridge; or for access to glens and 'picnicking' such as at the Lui Bridge or Craggan.

2.3.3 FOOTPATHS

There is an extensive network of paths on Mar Lodge Estate, some of which originate or continue beyond the boundaries of the Estate and are associated with long distance routes through the Cairngorms. There is long standing traditional use of many of these paths and most, but not all, appear on the Ordnance Survey maps of the area. Historically, there are five claimed, and one vindicated rights of way on the Estate: Lairig Ghru, Lairig an Laoigh, Glen Dee, Geldie-Feshie, east via Allanaquoich to Invercauld; and the Geldie-Tilt. Each of these is detailed in the 'Catalogue of Rights of Way in Scotland', though rights and user categories were never successfully defined. Open access on foot had always been encouraged on the Estate under Trust ownership, and to a large extent prior to this also. Some challenges arose from an obligation to the 'Easter Trust Principles' in the first edition of the Management Plan to effectively restrict the recreational passage of wheeled vehicles, including bicycles, beyond the public highway. 'The 'Land Reform (Scotland) Act, 2003', and the subsequent 'Scottish Outdoor Access Code' (2004) brought new access legislation to Scotland, and in many ways much simplified the understanding of access rights, in favour of responsible access for all.

Prior to 1995, many of the paths were suffering from significant erosion, initiated by visitor use (loss of surface vegetation), and exacerbated by a well-recognised combination of weather, high rainfall and severe winter temperatures, topography, altitude and exposure. An early condition survey, carried out in 1995, heralded a programme of repair employing skilled teams of upland path building contractors. Further detailed work, commissioned by NTS and SNH, led to the production of a detailed report in 2002 ('Scotland's Mountain Heritage'; Mar Lodge Estate Upland Path Audit; 2002 – 2013) which laid the foundation for a planned, grant-funded programme of works over a total of forty-one identified routes. During this period, the Estate pioneered the deployment of temporary 'Remote Accommodation

Systems' to allow contractors to work efficiently and safely at remote mountain sites. By 2009, a total length of 210 kilometres of path was brought to condition described as 'fit for purpose', made possible by generous grant from the European Regional Development Fund (ERDF) and SNH, totalling expenditure in the region of £0.5M. Since that time, the Estate has concentrated on a more cost-effective maintenance based path programme, currently subsidised to a budget of £22,000 per annum.

Although the footpath network provides a significant resource for the movements of visitors throughout the Estate, the principal rationale for path repair and maintenance in the wider estate is primarily one of protection of landscape and natural resources, through combating the forces of erosion. More detailed recommendations for footpath maintenance therefore appear in the Estate management plan.

In the area around Linn of Dee, however, a network of more highly specified paths has been constructed, and a free interpretive 'trail' leaflet produced. The purpose of this network has been to provide a pleasant variety of short walks of between twenty minutes and an hour and a half's duration, on good surfaced paths, suitable for families and the less able, and, in part, for all abilities. Close to the Linn of Dee itself, the paths provide a safe, easily followed route and excellent viewpoint, especially for coach parties.

2.3.4 BUILDINGS

Mar Lodge itself was converted into 5 self catering holiday apartments by the Trust and these were opened in 1998. The flats vary in size sleeping from 2 / 3 (Braeriach) to 15 (Bynack), and are available all year round. Four 'Mezzanine' rooms offer additional accommodation for up to 8, with shared facilities, but may be in use as staff accommodation for periods of time. The 'state' rooms on the ground floor of the Lodge are available separately for hire for functions, weddings, meetings or seminars to guests staying either in the Lodge or outwith. The upper floor of the Lodge, currently used for storage, is otherwise undeveloped space. The Lodge is a listed building – Category B.

The **Ballroom**, adjacent to the Lodge, is also a category B listed building, of Victorian origin which houses the spectacular Duke of Fife's collection of nearly 2500 separate antler heads. Of considerable historical and curiosity interest, the ballroom is increasingly used for private functions, and as a venue for ceilidhs and other events. It features prominently on an itinerary of Estate guided tours.

The **Stables** is a former Victorian stable building with inner courtyard, situated some 200 metres to the east of the Lodge. This complex currently comprises a mix of functions: Estate Office; Ranger Base; garages and store; Meeting Room; Basecamp; and Staff accommodation. The administrative functions do not always sit well with the hiring of the basecamp to visitors. Two sides of the building's upper floor are currently undeveloped, with potential for additional accommodation.

Other Estate buildings within this same area of the policies include the Deer Larders and the Workshop, including a sawmill. Essentially workspaces, these are generally of minor interest to visitors, and access is restricted in any case for operational and health & safety reasons. On a very few occasions, demonstrations have been set up for visitors in these locations as part of Estate Open Days. The original, Old Deer Larder, does carry some historical interest, and, it has been suggested, could benefit from some interpretation, almost as a 'museum' piece. The building is still in use by Estate staff for storage and an occasional workshop.

In the wider estate, there are several other buildings, either ruinous or in partial repair, that currently have no obvious or declared use. A few have some historical designation, and others are of local interest. The C(s)-listed 19th Century shooting lodge, **Derry Lodge**, situated 5km. from the public road in Glen Lui is a particular case in point. Potential futures, in a Visitor Management context, for some of these buildings, including Derry Lodge, are discussed in detail in the 'Objectives' section of this plan.

A number of **bothies** occur on the Estate, most in the core mountain zone:

Bob Scott's bothy is situated a short distance from Derry Lodge at the head of Glen Lui. Built originally by a group of enthusiasts in the 1980's, with permission of the estate at the time, in memory of the eponymous Bob Scott, former head keeper of Mar Lodge – the bothy attracted a rather negative reputation for a while, through misuse. The situation improved following NTS ownership of the Estate, and when the bothy was accidentally burned down in 2003, the Trust agreed to assist a rebuilding by the 'Friends of Bob Scott', with whom the Estate have a positive working relationship. The bothy is well used, and accessible to anyone on an open basis, within an hour's walk from the Linn of Dee.

Corrour, situated in the Lairig Ghru and **Hutchison Hut**, in Coire Etchachan, are stone built bothies, both on well used routes, capable of providing overnight accommodation for up to a maximum of six people comfortably. They are both open to access at all times on a non-key basis. Concentration of use can occur, with litter and human waste a particular problem, leading to a diminution of wild land quality. In the case of Corrour, a partial solution was reached with the installation of an experimental composting toilet in 2008. Both buildings are maintained under lease agreements with the Trust by the Mountain Bothies Association.

Garbh Coire shelter is a small structure built originally from a bolted iron frame, with an outer rubble covering, situated high in the coire below Braeriach. Originally built by members of the Aberdeen mountaineering fraternity for overnight stays whilst climbing in the coires, it is hardly maintained, and in a particularly poor, semi ruinous condition, barely fit for purpose. The bothies are discussed in detail in the 'Objectives' section of this plan.

2.3.5 OTHER STRUCTURES

A number of footbridges and vehicle bridges occur throughout the Estate. Whilst few, if any, of these have been constructed during Trust ownership, the Estate now has a responsibility to check their condition and either maintain, replace or remove them.

A prominent example is the B-listed iron Victoria Bridge, crossing the Dee at the main entrance to the Estate buildings.

The wider subject of buildings and archaeology on Mar Lodge Estate is covered in detail in the Property Management Plan.

2.3.6 EDUCATION / INFORMATION / INTERPRETATION

Formal education on the Estate has been delivered largely through the Ranger Service and Ecology departments. Mostly this has taken the form of site visits to the Estate by groups from primary, secondary and university / college levels; activities and content of visits tailored to fit individual groups. Other staff have contributed to these visits, notably the stalking team, where groups have come specifically to look at the subject of land management. Educational visits also provide an opportunity to promote the work of the Trust at Mar Lodge.

In the past, NTS has adopted a policy of minimising signs on the estate and where possible, removing signs from the more remote parts of the estate.

In 1998, NTS 'Omega' signs were erected at entrances to the property to signify ownership. A little later, following the opening of the self-catering apartments in the Lodge, and as part of a corporate design scheme, information and directional signage was put up at the Victoria Bridge entrance, and within the Lodge Policies to guide visitors to different building destinations within this part of the Estate.

New interpretive panels were erected in 2003, one at the Linn of Dee car park and one at the Linn of Quoich. Additional 'information' panels adjacent to these provide free leaflets, notices of events, and other 'topical' items of interest.

A range of printed interpretive material has been produced:

A free, general Estate leaflet, originally reproduced in foreign translations (French and German), has since been replaced by a new leaflet containing trail routes in the area around the Linn of Dee.

‘Woods and People’ – a booklet on the woodland history of the Estate.

Information folders are kept up to date in all Lodge apartments, and other guest accommodation on the Estate.

The Ranger Service offer ‘welcome’ talks to parties of guests staying on the Estate, and are available to answer visitors’ queries from their base in the Stable Block.

A programme of interpretive Guided Walks and Events is run annually, principally led by the Ranger Service, who are also available to offer site tours for parties on request, or give talks to audiences about the Estate.

A stand-alone ‘Mar Lodge Estate’ website, designed and set up originally as a student project, ran successfully for a number of years, before succumbing to technical issues and becoming outdated. A dedicated ‘Mar Lodge Estate’ page now appears on the NTS main website, and it is planned to update and develop this page significantly, to include information downloads.

3. GENERAL APPROACH & GUIDING PRINCIPLES

3.1 GENERAL APPROACH

Any provision of facilities for visitor management should be:

- ❑ Consistent with the property's Management Principles.
- ❑ Appropriate to the location
- ❑ Sustainable
- ❑ Reversible
- ❑ Not in conflict with statutory obligations

3.2 MANAGEMENT FRAMEWORK

3.2.1 PRIMARY AIM OF VISITOR MANAGEMENT

The Management Plan for the Estate (approved April 2007) contains the 'Mar Lodge Estate Management Principles (2006), which, whilst not legally binding, the Trust has a clear moral obligation to follow. A Principal aim, and eight further principles are recorded. They are reproduced almost in entirety here for reference, since all but the third and fourth have direct or specific relevance in the context of Visitor Management:

The Principal aim of the NTS shall be to manage the Estate in a sustainable manner for the benefit of the nation, ensuring the continuing conservation and restoration of its internationally important geology, flora, fauna, wild land quality and archaeological value.

Subject always to its management of the Estate in accordance with the principal aim and subject at all times to compliance with the Land Reform Act 2003 and the Scottish Outdoor Access Code:

- (i) *The NTS shall ensure appropriate public access to the Estate, subject always to the maintenance of the landscape and nature conservation interests. The Trust shall promote the best practice in the implementation of the SOAC.*
- (ii) *The NTS shall manage the Estate so as to conserve its valuable ecological and landscape features in harmony with its maintenance as a Highland Sporting Estate for so long as field sports remain legal. Such management will be carried out in a manner which will, so far as possible, enhance the social, cultural and economic well-being of the local community. Such aspiration to enhance the social and economic well-being of the community*

extends collectively to all of the management and interests of the Mar Lodge Estate. Declaring that, it is intended to demonstrate that the practice of field sports can be reconciled with the NTS' statutory obligation to promote public access.

- (iii)
- (iv)
- (v) *The NTS shall not permit the development of facilities which would compromise the wild land quality of the Estate. The principle of "the long walk in" shall be maintained at all times and the hills shall not be made easier or safer to climb. Notwithstanding the foregoing, in the short to medium term at least, access by the NTS' vehicles may be exercised to carry out effective conservation, deer management and field sports activities. Otherwise the NTS shall make continuous and constant efforts to dissuade, and where possible to prohibit, the use of mechanical or wheeled vehicles and all mechanical recreational activities beyond the immediate environs of the mansionhouse known as Mar Lodge. The Trust shall promote implementation of best practice of the SOAC.*
- (vi) *The NTS will favour the continuing use of existing buildings for their original purpose. Notwithstanding the foregoing the NTS may carry out some development of Mar Lodge including a viable visitor facility but such development shall not compromise the principal aim so far as affecting areas beyond the immediate environs of the mansionhouse known as Mar Lodge.*
- (vii) *The NTS shall share with the public an appreciation of the issues involved in managing the Estate as a wild land area, through appropriate interpretation and education.*
- (viii) *The NTS will manage the Estate recognising that it forms part of the wider Cairngorms area.*

3.2.2 STATUTORY OBLIGATIONS

The following National legislation and guidelines are particularly relevant to visitor management related activities carried out on Mar Lodge Estate:

Land Reform (Scotland) Act, 2003

Relates to access to the countryside, and from which arose:

The Scottish Outdoor Access Code (SOAC)

Delivers Access rights, where these are exercised responsibly. Contains guidelines for best practice

Countryside Design & Maintenance Regulations, 2007

Relates to the construction of facilities in the countryside – bridges for example.

Equality Act, 2010

Disability Discrimination Act, 2005 (Mostly superceded by above)

Relates to the provision of 'reasonable adjustments' to barriers that put a disabled person at a substantial disadvantage.

Health & Safety At Work Act, 1974

3.2.3 TRUST POLICIES

Wild Land Policy (2002) (Fuller reference below)

Conservation Principles (2003)

Access, Enjoyment and Education Principles (2005).

Health & Safety Policy This includes the requirement to carry out risk assessments for all activities, and the Fire Plan for the Estate. The responsibility for the safety of visitors on the property lies in part with Estate staff.

3.2.4 WILD LAND POLICY (and Unna Principles)

Percy Unna's contribution to the Trust arose from his wish and that of other mountaineers, to ensure year round access to Scotland's mountains in the face of landholder resistance in the 1930s. The full details of his wishes were encapsulated in his letter to the Trust, written in 1937. Initially these principles were applied purely to those properties that his funds secured i.e. Glencoe and Dalness; Kintail and Ben Lawers. However, the NTS Corporate Plan in 1992 expanded the application of the principles to all Trust mountain properties.

The applicability of the principles was subject to the review of the Wild Land Policy Group in 1997, who developed the Trust's own Wild Land Policy, approved by Council in 2002. The Policy evaluates the importance of wild land by identifying a list of 'indicators', which bestow either positive or negative attributes, either by 'enhancing' or 'detracting' from a sense of wildness. The WLP complements rather than replaces Unna's Principles, and seeks to place a value on Scotland's diminishing wild places that can be readily understood and embraced by the public. In attempting to articulate the qualities that make wild land one of Scotland's finest if neglected assets, the Trust arrived at the following broad definition:

"Wild land in Scotland is relatively remote and inaccessible, not noticeably affected by contemporary human activity, and offers high quality opportunities to escape from the pressures of everyday living and to find physical and spiritual refreshment"

It is a central tenet of both Unna and the WLP that the hills should not be made

easier or safer to climb by the provision of unnecessary facilities.
The full Wild Land Policy is available as a download from the Trust's main website – www.nts.org.uk

3.2.5 DESIGNATIONS

Land within the Cairngorms carries many different National and European designations reflecting its importance for landscape and nature conservation. Those falling within the boundaries of Mar Lodge Estate are:

Cairngorms National Park

SPA – Species Protection Area

SAC – Special Area of Conservation

SSSI – Site of Special Scientific Interest

NNR – National Nature Reserve (about to be re-notified)

SAM – Scheduled Ancient Monument (seven areas on Mar Lodge)

Listed Building Status

3.3 BALANCING ACCESS & CONSERVATION

One of the Management Principles for the Estate is to: *'Ensure appropriate public access to the Estate, subject always to the maintenance of the landscape and nature conservation interests. The Trust shall promote best practice in the implementation of the SOAC'*. Many different types of recreational activity are carried out on the Estate. In order to fulfil the above aim, the Trust must be able to identify and define 'appropriate' activity and have an understanding of how, where and at what level this activity can take place on the Estate without detriment to its wild landscape and nature conservation qualities.

It is suggested that this is articulated in the form of a series of principles for legitimate recreational activity as defined within the Scottish Outdoor Access Code, and developed as guidance and a 'code of best practice' for the application of the SOAC in areas of high wild land quality, which can be communicated to visitors. It should serve as a practical tool with the following uses:

- To provide guidance for Estate staff by clearly stating Trust policy for specific activities on Mar Lodge Estate and outlining best practice.
- To provide a source of information which can be incorporated into interpretive material, and which can be communicated verbally by the Estate staff directly to the visitor.
- To provide a clearly articulated framework for the management of recreational activities on the Estate, which can be communicated through consultation with

stakeholder organisations.

3.4 SOCIAL AND ECONOMIC CONTEXT

3.4.1 LOCAL COMMUNITIES

The second of the Mar Lodge Estate Management Principles carries the directive that:

“The NTS shall manage the Estate so as to conserve its valuable ecological and landscape features in harmony with its maintenance as a Highland Sporting Estate for so long as field sports remain legal. Such management will be carried out in a manner which will, so far as possible, enhance the social, cultural and economic well-being of the local community”

Mar Lodge Estate is a destination for many visitors to upper Deeside and the Cairngorms. Many of these will seek accommodation in the local area, and also make use of the shops and businesses in the villages of Braemar and Ballater. Hillwalking is a major activity on the Estate, which has been shown through a number of surveys and reports to have direct economic benefits to local communities, and guests in the Mar Lodge apartments shop locally for produce and some eat out at local cafes and restaurants. They also visit local attractions and attend local events. Field Sports also attract significant numbers of guests who will find accommodation locally. The Trust should be able to clearly demonstrate to the community the many positive benefits the Estate can offer, to continue to be an asset to the tourism economy of Deeside.

3.4.2 WIDER CAIRNGORMS and NATIONAL INTEREST

Mar Lodge Estate Management Principle (viii) states:

“The NTS will manage the Estate recognising that it forms part of the wider Cairngorm area”

The Estate lies squarely within the core mountain area of the Cairngorms National Park. Its landscapes and important areas of conservation do not, however, stop at the boundaries of the Estate as many of them stretch into neighbouring Estates. Users, coming to the Estate for recreation, often walk from the Estate through neighbouring land in the course of their route, usually being unaware of where the boundary of Trust ownership lies. Similarly, damaging impacts from users or other external sources cross boundaries and it may not be possible to exclude these impacts from the Estate through Trust management alone. Co-ordinated management will be the most effective way for the Trust to achieve its management aims on the Estate - working with other landowners, voluntary bodies, land

managers, recreational groups and individuals. This concept of co-operation is one of the fundamental pillars of the management strategy for the Cairngorms, enshrined in the National Park Plan. The Cairngorms was at one time considered for potential 'World Heritage Site' status, confirming a deserved recognition of the Cairngorms as a special place for people to visit, and placing a responsibility on the shoulders of organisations such as the Trust to manage the area to the highest standards.

It is important that the Trust continues to liaise and consult with others with an interest in the future of the Cairngorms, and this will include the Cairngorm National Park Authority; Scottish Natural Heritage; Cairngorms Outdoor Access Trust; neighbouring estates; local Councils; stakeholder groups and organisations.

3.5 MANAGEMENT ZONES

Visitor Management on Mar Lodge Estate will require a different approach in certain areas of the Estate, depending on their characteristics; the level of visitor use; the overall emphasis of management associated with distinct areas; which in turn will influence the recreational activities that are appropriate.

In pulling these issues together in the context of the Estate, three Visitor Management Zones are identified :

- The Wider Estate
- The Designed Landscape Zone, including buildings in constant use.
- The Intermediate Zone, including the lower glens.

Management can enhance or detract from wild land quality; any form of zoning must recognise that boundaries between zones are neither static nor clear cut, but imply where management emphases change.

The location and boundaries of these zones are illustrated in Figures 1 and 2.

Full descriptions of the characteristics and management strategies for these zones are provided in Section 3.2.

3.5.1 THE WIDER ESTATE

Rationale

Inherent within the above management framework, is one of the Trust's main aims for management of the wider Estate: the maintenance and enhancement of wild land quality. Management for wild land quality is an uncertain goal, in that wild

land itself is not easy to define, but is often easily recognised, even tied as it is to individual perceptions. However, as this concept is one which underpins much of what the Trust is trying to achieve on Mar Lodge Estate, it is vital to recognise its significance.

Wild land offers a spiritual, aesthetic experience to the visitor not easily found in Britain, or indeed Europe. There are, however, certain recognised characteristics of wild land that enhance or detract from wild land quality. Wild land has been little modified by man in the eyes of the visitor - it offers a natural environment into which the walker can escape from the pressures of modern life, seeking spiritual refreshment in a landscape which, by its scale and ruggedness, suggests the dominance of nature over man. It is recognised that, in fact, much wild land in Scotland has been modified historically, with for instance visible evidence of shieling sites and other human activity. Whilst this does not necessarily detract from wild land quality, more recent signs of human activity, particularly if carried out insensitively, are more likely to do so. Artefacts and developments dated within living memory (say two generations) impinge negatively.

A sense of remoteness and an element of risk are clear criteria of wild land. Implicit is a sense of the individual being far removed from the trappings of day-to-day life, particularly roads and cars, but also the mass of humanity. Walkers should be self-reliant in terms of navigation and equipment, and facilities should not be provided to make access easy and, indeed, may be removed to enhance the wild land quality. The long walk-in embodies the above concept.

In accordance with Management principle (v): *“The NTS shall not permit the development of facilities which would compromise the wild land quality of the Estate...”*

There will therefore be a presumption against the provision of visitor facilities in the Wider Estate, unless positive benefits to wild land management can be clearly demonstrated and justified.

3.5.2 THE DESIGNED LANDSCAPE ZONE

Rationale

The landscape of this area is a product of deliberate design and management over time. Trees have been planted according to a plan and drives and vistas laid out to emphasise the aesthetic qualities of the landscape. This is also the functional base of the Estate, encompassing holiday accommodation, offices, workshops and staff accommodation, as well as being the main entry point of visitors to the Estate buildings.

In this area, the management of visitors will be of a more formal, designed nature, with additional input of resources. Appropriate facilities, events and activities can be provided to enhance the visitors' experience and communicate the Trust's

management aims for the Estate. In planning management activity in this zone, however, consideration will always be given to the possible influences which this may have on the wider Estate and in this case, a precautionary approach adopted.

3.5.3 THE INTERMEDIATE ZONE, INCLUDING LOWER GLENS

Rationale

The Intermediate Zone represents the interface or 'buffer' between the wider Estate and the designed landscape. Although it may exhibit most of the landscape characteristics of the wider estate, it may experience visitor activity more associated with its proximity to the designed landscape. Access along the tracks leaving the public road may on one part be a route for those heading for a more remote destination and the 'wild experience' of the wider Estate, or alternatively provide a quality experience for the 'less adventurous' whose perception of the area will differ considerably.

The circular walk walking route at the lower end of Glen Quoich, for example, returning via the footbridge 2km. upstream from the car park, appears in a list of 'Ten Best Short Walks' on the 'Walk Highlands and Discover Royal Deeside' website. The walk from Linn of Dee, along the Glen Lui track to Derry Lodge and return appears in the 'Top Ten Longer Walks' on the same website.

Derry Lodge is a particular case in point. The area around Derry Lodge is surrounded by the wider Estate and exhibits most of its characteristics, particularly in relation to landscape character and 'wild land'. However, the presence of the Lodge itself, its associated cultural importance and high level of recreational activity in the area, confer other qualities on this zone which require a different management strategy from the rest of the wider Estate. Its inclusion at the limit of the Intermediate zone therefore represents a pragmatic approach to visitor management, based on the premise that the continued presence of the lodge will influence visitor activity at this location, and can hopefully be designed to do so in a positive manner. Derry Lodge lies at the junction of two key rights of way and is the gateway to a major part of the heartland of the Cairngorms. It is approximately a one-hour walk from the Linn of Dee car park and has long been a traditional camping and bothying location, as well as the main access route to the high tops of the Cairngorms from the southern side. The Trust's aim of limiting the use of wheeled vehicles and encouraging responsible access throughout the wider Estate could increase the demand for overnight accommodation nearer the visitor's remote destination. It is therefore considered necessary to identify some form of camping management strategy for this area, allied to a strategy for the positive future use of Derry Lodge and surrounding buildings, and might include the provision of a toilet and basic hostel facilities. A full account of the rationale for the future of Derry Lodge appears in the 'Objectives and Action' section, under 'Buildings'.

4. OBJECTIVES AND ACTIONS

4.1 VISITOR WELCOME

4.1.1 PRE-ARRIVAL (MARKETING)

Rationale

Pre-arrival visitor provision is mainly aimed at promoting Mar Lodge Estate to potential visitors and ensuring that those who decide to visit have sufficient, clear information to do so easily, enjoyably and safely.

Because of Mar Lodge's location, it seems likely that a majority, other than repeat visitors, are likely to plan a visit in advance, rather than en-route between destinations. The rise in the use of the internet for holiday planning suggests that use of websites should be considered as a significant marketing method. The principal one of these should rightly be the Trust's own main website – www.nts.org.uk . Marketing of the Estate's accommodation facilities already appears on this site, and should be reviewed to investigate if the way apartments are let could be improved.

Other websites that promote tourism within the region should also be utilized – the most notable of these would be those of the Cairngorms National Park / Cairngorms Business Partnership (CBP), and Royal Deeside Destination Management Organisation (RDDMO).

For day visitors, visitor centres can play a more important part. 'Visit Scotland' Information Centres, particularly those in Braemar, Crathie and Ballater, are well placed to provide information about Mar Lodge as a destination.

A number of other Trust properties are situated within less than a two-hour drive from Mar Lodge, mostly castles within the North-East area of Aberdeenshire. Whilst these properties are substantially different in character from the Estate, they receive significant numbers of visitors who present an immediate audience for information about Mar Lodge, and vice versa.

Guests staying in the Mar Lodge apartments currently receive information in advance of their visit. At the very least this covers directions on how to arrive at the property, however this could be extended or perhaps better presented.

Objective

Find ways to market Mar Lodge as a special destination for people from Britain and abroad, by reference to the varied opportunities that the Estate can offer for a range of visitors.

Actions:

Develop dedicated Mar Lodge pages, including downloads, on the NTS main website – www.nts.org.uk

Investigate the possibilities of utilising other social networking initiatives, such as 'Facebook', 'Twitter' and Apps.

Work through other tourism websites and publications, notably those of the Cairngorms National Park, CBP and RDDMO.

In the absence of a visitor centre at the property, work with local 'Visit Scotland' centres to provide information about the Estate.

Offer familiarisation visits to local staff from 'Visit Scotland' Centres, and perhaps extend these to local accommodation providers.

Improve sharing of information and promotional material with other NTS properties in North East 'cluster'.

Review and update the information currently sent out to accommodation guests.

4.1.2 ORIENTATION

Rationale

There is currently a lack of road signage leading visitors directly to 'Mar Lodge'. Most visitors would normally arrive at Braemar, as the nearest settlement, and subsequently either: have pre-visit directions direct from the Estate; directions via another information source; be directed via the Visit Scotland Information centre; or have visited the area before. Existing traffic signs from the village of Braemar direct visitors to 'Inverey', to 'Linn of Dee', and to 'Linn of Quoich', - the latter two being known destinations on the Estate (and car parks), however it is evident that directional signage to the Estate could be much improved.

NTS signs at the 'official' entrance to the Estate across the Victoria Bridge, and once within the 'Policies', direct 'official' visitors to the Lodge, Stable Block, and Estate Office. These were installed during an earlier phase of organisational 'branding' some years ago. All are now showing signs of ageing, and some lack of clarity. Depending on possible further building or facility development around the Lodge and Estate buildings, these will inevitably require review and updating.

Objective

Produce clear and consistent information and directional signage for visitors approaching, and upon entering the Estate.

Actions:

Consult with Visit Scotland / Aberdeenshire Council to have 'brown tourism' directional signage to Mar Lodge from the A93 and Braemar village.

Review all existing directional and information signage, and produce new signage plan for the grounds of the Estate.

Produce high quality branded signage on entry to Linn of Dee car park, to signify ownership.

Erect 'National Nature Reserve' signage at entry points, to meet advance standards of NNR re-notification, when confirmed.

4.1.3 RECEPTION

Rationale

In the early years of Trust ownership of Mar Lodge, a considered decision was reached that in a relatively remote location and low visitor numbers, and an absence of visitor facilities, a dedicated visitor centre on the property could not be justified. The decision to convert the Lodge to self-catering apartments, and not open the building as a visitor attraction on a daily basis, was a significant factor in this. In part, this decision was reached in the belief that the house had few original contents (following destruction by fire in 1991, and successful reconstruction) and lacked sufficient historical interest. Experience has subsequently shown, to judge from numerous 'open days' and guided tours held over the years, that there is, particularly from NTS members, a promising level of interest in viewing the Lodge and adjacent Ballroom which could be capitalised upon.

Much will depend on possible future development of visitor facilities, for which a sound business case is yet to be made. If visitor numbers and activity in the area of the Policies around the Estate buildings is increased, there could be a sound case for a more formal reception or information area within the Estate buildings.

The current situation in the Stables Block, where Estate Office, Ranger Base, Visitors Basecamp, and staff accommodation present a sometimes challenging mix of different functions, may require a re-appraisal based on a review of potential uses for all buildings on the Estate. An opportunity to relocate more administrative functions under the roof of the Lodge could be considered, and might offer the prospect of a more formal reception or information area for visitors, if a need is identified. The Ranger base serves as an important 'drop-in' for visitors seeking information – and may also benefit from being better advertised or placed in a more accessible location.

The Cairngorms National Park Authority has up until the present time, no plan to set up any 'National Park' visitor centres around the Park. The nearest visitor centre to the Estate is the 'Visit Scotland' Information Centre in Braemar Village. The Estate currently utilizes this centre through its staff and supplying Trust literature and information. Any strategic change to this situation could be of benefit to the Estate as well as the local area. The Estate should continue to value its links to Braemar Village, and any shared opportunities that this could present. This should be the subject of consultation with local community, tourism and partnership interests and the Trust should look to be involved in any debate and discussions regarding a current Braemar MasterPlanning initiative.

For 'outdoors' visitors to the wider estate there is information available in the form of interpretive panels and leaflets. The frequency and seasonality of visits to Linn of Dee, whilst being a prime visitor focus on the Estate, does not sufficiently justify the provision of a formal 'visitor centre'. An increased staff presence during peak visitor times at the Linn would however increase the opportunities for 'face to face' contact, and bring potential added benefits to membership recruitment. There is a need to review and renew interpretation at the car parks within the next five years.

Objective

Consider ways to provide more formal reception for visitors to the Estate on a face-to-face basis, either on the Estate or through partnership elsewhere.

Actions:

Carry out an analysis of present and future building functions within the Estate, and use this to guide a decision on the provision of a formal reception area within the Designed Landscape Zone, to provide face-to-face information for visitors.

Provide an increased staff presence at the Linn of Dee during times of peak visitor activity to engage with visitors to the outdoor environment.

Engage with local community, tourism and partnership interests to consider shared premises and opportunities for the welcoming of visitors to the area.

4.2 VISITOR FACILITIES

4.2.1 TRAFFIC MANAGEMENT

Rationale

The public road serving the Estate also serves the village of Inverey and other private properties. The majority of traffic flow from Braemar to the Estate proceeds directly to Linn of Dee, and continues eastwards along the north side of the glen to reach Glen Quoich. 'Official' visitors to the Estate buildings and Lodge facilities leave the public road to enter the Estate via the Victoria Bridge, which prohibits coaches and large vehicles, which must otherwise enter the Estate via Linn of Dee and from the west. Any development of activities or visitor facilities within the Designed Landscape area of the Estate would require an appraisal of the provision for additional traffic and parking within this zone. Clear directional signage would be required to differentiate this traffic from the 'outdoor' visitors whose 'preferred' destination would still be to the Linn of Dee / Quoich. Drawing traffic into the Estate via Victoria Bridge would require to be carefully thought through in order to avoid the establishment of a 'short-cut' route to Glen Quoich. Whilst this might initially appear as a potentially attractive option, the current mix of Estate buildings and functions, and road layout, mitigates against this on traffic flow and safety grounds. There are few, if any, opportunities for one-way systems.

Any significant developments for a Visitor Centre in Braemar (no definite proposals are 'on the table'), perhaps as part of a Braemar MasterPlanning initiative, could open up opportunities for further car parking in the village, and consideration of enhanced public transport between the village and Linn of Dee / Quoich. These are clearly initiatives to be discussed at a strategic, partnership level, but if realised, could have significant benefits for wild land / the 'long walk in' and the development of circular walking and cycle routes between Braemar and the Estate. The previous improvement scheme at Linn of Dee saw the installation of a composting toilet facility. This can be rightly considered to have been a success, however it has proved to be high maintenance and not completely fulfilled its potential as a model of green, sustainable management. As the fixtures and fittings are now ageing to the point of replacement, there is an opportunity to rethink and redesign the facility in the light of experience to date. Key elements of redesign should ensure a more efficient and manageable composting system, and the inclusion of renewable technologies such as solar panels, regrettably budgeted out of the original design.

A plan needs to be devised for the management of parking at Glen Quoich. The existing arrangement has worked reasonably well, however the pending replacement of the road bridge presents an opportunity to balance the merits of retaining the bulk of parking to the west of the bridge, or returning to the previous location across the bridge. In either case, careful thought needs to be given to landscape screening and the prevention of erosion by vehicles.

The Cairngorm Mountain Recreation Survey (1999) indicated that 54% of mountain

users regard it undesirable to increase the size of car parks. All traffic counts since that time confirm there is still no justification for increasing the capacity of car parks – overspills occur on just a handful of occasions in any year, and are to an extent weather dependant.

Objective

Investigate the potential for traffic management beyond the village of Braemar

Actions:

Carry out a maintenance overhaul of the Linn of Dee car park – resurface using fresh addition of material and rolling.

Re-design and renew the composting toilet facility in the Linn of Dee car park.

Devise and implement a car parking scheme for Glen Quoich.

Consider potential areas for additional car parking within the Designed Landscape Zone in conjunction with any proposed new facilities or activities in this part of the Estate

Carry out low-key preventative measures to curb roadside parking where undesirable, such as passing places, gateways

Be involved in any local public transport initiatives, and support opportunities.

4.2.2 BUILDINGS

Buildings currently in use:

The Lodge

The self-catering apartments have proved to be a great success in securing the financial stability of a previously empty building, following acquisition by the Trust. More recently, the marketing of the Lodge as a wedding venue has seen an increase in functions and consequent income generation. The kitchen area has recently been upgraded, and whilst principally serving to cater for functions, could be considered being put into use to provide refreshments for the visiting public.

A business plan should consider additional ways of presenting the Lodge as a visitor attraction, and seek ways of increasing revenue.

The Ballroom

The ballroom is increasingly used for private functions, and as a venue for ceilidhs and other events. It features prominently on an itinerary of Estate guided tours, and attracts considerable visitor interest, largely owing to its unique collection of nearly 2,500 stag heads within its interior. Some upgrading of facilities within the Ballroom would be beneficial (subject to Listed Building status), and fresh opportunities for the public to view the building considered.

The Stables

This complex currently comprises a mix of functions: Estate Office; Ranger Base; garages and store; Meeting Room; Basecamp; and Staff accommodation. The administrative functions do not always sit well with the hiring of the basecamp to visitors. Two sides of the building's upper floor are currently undeveloped, with potential for additional accommodation.

Old Deer Larder

The original, Old Deer Larder is a building of cultural and historical significance, still in use for storage and an occasional workshop for Estate staff. There is some potential for visitor interest in its interpretation as a 'museum' piece, if this can be reconciled with its current use.

Objective

Examine the potential for increased public access to the buildings within the Designed Landscape Zone, through the production of a business plan.

Actions:

As part of an overall business development plan:

Evaluate potential use(s) for the upper floor of Mar Lodge, either in a commercial capacity, or in an administrative or accommodation function.

Review the marketing of the Mar Lodge self-catering apartments to achieve optimum occupancy, alongside other functions and potential uses for the building.

Consider the use of the 'public' rooms on the ground floor of the Lodge as a small venue for conferences or lectures, or as a facility for local community functions.

Consider ways to open the Lodge and Ballroom to the public on a more regular basis, in addition to 'Estate Open Days'.

Capitalise on the above by offering simple refreshments to visiting members of the public within the Lodge or Ballroom.

Designate an area of the Lodge as a licensed bar to facilitate functions and be available to Lodge guests.

Designate an area within the Lodge for the interpretation of the natural and cultural history of the Estate and the Trust's management work, for guests and the visiting public.

Carry out improvements to the facilities within the Ballroom to maximise bookings for wedding functions; ceilidhs; meetings; conferences or other functions.

Review the current functions within the Stable Block and consider relocation.

Subject to the above, draw up a plan for the development of the empty upper storey of the Stables.

Consider the possible use of the old deer larder in interpreting the tradition of deerstalking on the Estate.

Buildings not currently in use:

Derry Lodge

Rationale

Derry Lodge is a 19th Century shooting lodge of considerable size and significance, which carries listed building status [C(s)]. It is situated in at the head of Glen Lui, approximately one hour's walk from the Linn of Dee car park. Following the 'Victorian' era, its use as a sporting lodge declined, and it was latterly used for military training around WWII, and leased as a mountain hut by the Cairngorm Club until the 1960's. The building then stood empty for many years, suffering decline and some vandalism, and was boarded up in the 1980's.

Derry Lodge has been the subject of a number of structural and condition reports, and consultations on the future of the building, since Trust ownership from 1995. Pending an outcome, approximately £60,000 has to date been spent on securing the structure, rendering it wind and watertight. A consensus now favours that a 'positive use' be found for the building. Located at the junction of two major rights of way into the wild 'core' of the Cairngorms, it is vital that any development of the lodge should contribute in a way that enhances visitor management in this part of

the estate, for example by helping to manage camping and mitigate against undesirable activity such as fire, litter, and pollution. The building has no mains services, such as water, electricity or sewerage, so that an exciting opportunity presents itself to develop the building as a model of sustainability and 'green', renewable technologies.

Objective

Secure the renovation of Derry Lodge and find appropriate new uses which contribute positively to land use and visitor management in the Wider Estate.

Actions:

Continue to maintain Derry Lodge in a wind/weather/vandal proof condition until a sustainable development is found which is compatible with Estate management objectives, and visitor management zones.

Develop a proposal to restore Derry Lodge, through consultation, to a use or range of uses appropriate to the significance of the location, as a model of sustainability and renewable technologies.

Use the proposal to secure grant funding and / or investment from prospective partners and supporters to take forward a project.

As a part of the proposal, review the uses of the adjacent buildings around Derry Lodge.

Manage the area around Derry Lodge in a manner which will reduce the impacts of visitor activity on the natural heritage and landscape qualities of the area.

Consider the use of part of Derry Lodge as a forward base and accommodation for stalking parties in the Derry and Luibeg parts of the Estate.

Maintain and continue use of Luibeg Cottage as a forward base for Ranger team, other Estate staff, and contract workers working in the Wider Estate, or as accommodation for staff managing Derry Lodge.

Princess Louise's Tea Room (Queen Victoria's Picnic Lodge)

Situated adjacent to the local natural visitor attraction of the 'Punch Bowl' in the Lower Glen Quoich, this small building is a 'B' listed 'cottage ornée' believed to have had association with, or visited by, Queen Victoria. In 1997, the building was re-roofed with traditional wooden shingles, cut from local larch, and the south

gable wall underpinned and re-pointed. No further works have been carried out on the building, and the south gable is again showing signs of subsidence and cracks. Little remains of the internal floors and partitions, and the window and door openings are boarded up. Located in such a public place, the building is subject to occasional vandalism, shutters being removed by people to gain access inside. A positive use for the building would be beneficial, both to secure the future of the structure, and to present a more managed, cared-for appearance to visitors to the Quoich. The building is considered too small, and located too publicly, to be considered for accommodation. A better use would be for the building to provide an interpretive feature for visitors, relating themes about the building itself, the cultural and natural history of the area, and of the work of the Trust on the Estate. Done imaginatively, and if the logistical concerns of having to secure the building at night against unwanted access, and complying with listed status can be resolved, this would be a beneficial use, providing a useful visitor facility in a popularly visited part of the Estate.

Action:

Devise a scheme to provide a 'day shelter' and interpretive feature within the Princess Louise's Tearoom, secure listed building consent, and seek funding.

Allanaquoich Steading

The steading comprises the old farm buildings adjacent to the old Allanaquoich Farmhouse (renovated in 1998 as staff accommodation). In a generally poor state of repair, although the structure is predominately watertight, the traditional, low-doored design renders them largely unsuitable for modern agricultural machinery, although some Estate equipment is currently stored there. A project is already under way to consider drawing up plans for conversion of the building to accommodation – whether this will be for staff, or holiday use, or to offer local low cost housing, or a mix of these is yet to be decided. The success of the project depends on the replacement of the bridge over the River Quoich (also a live project) to allow traffic and service vehicles to access the development. The current roof is composed of asbestos, which will require specialist removal.

Actions:

Pursue plans for conversion of Allanaquoich Steading to suitable accommodation.

Incorporate a sensitive conversion, allowing for some consolidation and interpretation of the attached 19th Century sawmill remains.

Gate Lodge

The Gate Lodge lies at the 'official' entrance to the Estate, and is a 'B' listed structure, along with the Victoria Bridge to which it is an adjunct, although on the opposite side of the road. It is a small building, with a decorated frontage, consisting simply of two internal rooms. A poorly built, 1950's extension at the rear of the building was removed during Trust ownership. Its prominent position, at the edge of the highway on a slight bend in the road opposite the Estate entrance, makes any decision on a future use as a visitor facility a difficult one, purely on traffic safety grounds. There is a small area next to the building suitable for parking one or two vehicles off the road. The building would benefit from a positive use, however this is unlikely to be as accommodation or for interpretation. Its proximity to the river might make it appropriate to assist the Estate's salmon fishing enterprise, as a shelter for fishermen

Action:

Secure a positive use for the Gate Lodge in order to enhance its appearance, possibly as a 'Fisherman's bothy'.

Quoich Cottage

Quoich Cottage was originally a staff house. It is situated at the lower end of the River Quoich, close to the car park area and informal visitor activity. Planning permission for renovation was sought in the 1990's by the previous Estate owner, but this has long since lapsed and the condition of the cottage now appears severely compromised. Its proximity to the car park put it in an area well frequented by visitors – perhaps making it unappealing for accommodation use. Potential uses for interpretation or visitor facility may be better met further upstream at the Picnic Lodge.

Action:

Investigate the condition of Quoich Cottage, and if no sustainable future use can be found, or if beyond reasonable repair, recommend removal.

Red House

The Red House is situated at the junction of the Geldie and Bynack burns, approximately seven kilometres west from the Linn of Dee. It lies within an area designated as Scheduled Ancient Monument (SAM) and therefore has high archaeological significance. The building has been the subject of considerable

investment to secure the structure, however the lack of a permanent use has contributed to a continued deterioration. The roof of the building is extant, so that it has become attractive for walkers to use (and abuse) the building as a shelter or overnight bothy, though its condition raises issues of health and safety in this context. This current 'use by default' may not be the most appropriate future use, and may not be appropriate or acceptable, given the historic status of the building. The current situation is not acceptable – repair is urgently required, and this might best be achieved through agreement of a new use for the building.

Action:

Evaluate possible future sustainable use(s) for the Red House, perhaps as a pony stable, and consult with Historic Scotland to secure the building.

Archaeological Remains

All archaeological remains within SAM's on the Estate are to be the subject a management agreement with Historic Scotland, and those outwith (where known) are also documented to evaluate their historical and cultural significance. In a visitor management context, the Estate's archaeological and cultural heritage should be a priority theme for interpretation. Because the majority of these remains lie within the zone of the wider estate, interpretation will most appropriately be achieved 'off-site' through leaflets / talks, or 'on-site' through guided walks or educational visits.

Action:

Produce and implement a plan for the interpretation of the Estate's archaeological and cultural heritage.

4.2.3 FUTURE DEVELOPMENT PLANS / PROVISION OF ACCESS FACILITIES

Rationale

It should be possible to extend the range of facilities and activities available for visitors to the Estate, in a way that sits comfortably with the visitor management framework and the guiding principles. There are obvious benefits from this approach such as potential revenue generation, and somewhat less obvious benefits such as additional opportunities for interpretation and membership recruitment. A fundamental question would be whether such new opportunities just provide additional interest for existing visitors, or whether they have the

capacity to attract 'new' or additional visitors. Visitor surveys clearly indicate that the area of Upper Deeside is very different in character from the area of Speyside on the west side of the National Park, where, it is fair to say, a greater number and variety of visitor facilities are present. None of the 'listed' main visitor attractions for the region (Cairngorms National Park Visitor Survey, 2010) are close, and Upper Deeside is not served by rail or good public transport links. Large centres of population are over 50 miles from the Estate, and there is a distinct seasonality to total number of visitors (See visitor profile). It is vital that a proper business case can be made, therefore, before making significant investment into new visitor facilities. One further potential issue to address might be to balance the current perception of value placed on 'peace and quiet' of the Lodge and surroundings, with growth of commercial activity and additional facilities / traffic within Designed Landscaped Zone. An evaluation would also need to address potential conflicts between through traffic, estate vehicles in a working environment, pedestrians and young children, proximity of staff accommodation, on existing internal roadways; and strike the right balance between the use of buildings for visitor facility and a recognised need for additional staff accommodation.

Nevertheless, a number of ideas for potential development have been put forward:

Facilities:

- Additional holiday accommodation. Spare capacity exists within the Lodge and Stables, and at Allanaquoich Steading
- A reception and information / interpretation area. Most likely within the Lodge or Stable building, depending on an evaluation of functions.
- A bar or licensed facility.
- A 'café' or provision of light refreshments. This could range from very simple fare for 'passing' visitors, or those taking short tours of the Lodge and Ballroom – to high end catering, perhaps utilising the ambience of the Lodge dining room, hiring in a professional chef, and using local produce such as venison from the Estate.
- A campsite – there is a recognised need for additional 'informal' camping (as opposed to 'wild camping', defined under SOAC as lightweight, transient and remote) in the area around Braemar. The area of Glen Clunie, south of the village is a particular problem area, and discussions have taken place with consultants to consider future options for additional camping around Braemar. A designated camping area within the Designed Landscape Zone may help to provide an alternative to roadside camping around Mar Lodge – it is unlikely, however, that it could significantly help to address the problem in the Clunie. Any potential site would need to be chosen carefully, and be well screened, otherwise it could easily impact on the 'picturesque' setting considered important for wedding functions. There is then the additional obstacle or expense of providing services (mains, drainage, electricity?) if sited a discrete distance from existing Estate buildings.
- Increased access opportunities for visitors of limited mobility or disabled –

- within buildings and all abilities paths – access to the garden.
- Development of the walled garden – a community orchard? – a mountain plant nursery?

Activities:

- Host additional large 'events' or 'festivals'.
- Clay pigeon shooting. This could be with traditional guns, or perhaps more cost effectively as a 'laser' shoot. Would this be marketed as an 'add-on' activity for residential guests or as an attraction in itself?
- Archery – as above.
- Ski trails – very seasonal and very weather dependant.
- Pony trekking. This would require significant investment, and properly trained staff to run. Advantages for the Estate would be to provide additional potential for hill ponies outside of the stalking season. One aspiration for field sports is to be able to offer stag stalking involving the use of ponies. It also offers support for other potential activities for ponies, such as providing non-vehicular travel (perhaps with cart) into the wider estate, for example to a future development of Derry Lodge.
- Special Interest holidays and courses – these could be based on a range of themes: walking; outdoor skills; wildlife tourism; photography; crafts; art; cookery to name a few, and could range from day courses to full serviced accommodation. Some of these have been trialled in the past with mixed success. The evident interest in wildlife tourism suggests some of these ideas could work if they are marketed better. Estate staff already possess some of the skills to lead these activities – alternatively we may need to franchise out to experts in a particular field.

Objective

Examine the business case for the development of a range of visitor facilities and activities on the Estate with the aim of improved income generation and increased opportunities for visitor engagement.

Actions:

(not requiring full business case)

Consult with neighbours and organisations regarding possible provision of a designated camping ground in the Braemar area.

Support pedestrian and cycle links to Braemar, in conjunction with neighbours and other organisations, including the investigation of the provision of a new footbridge across the Dee, to increase the potential for 'low ground' circular routes to Braemar (as suggested in the Core Path Plan).

Identify and develop preferred walking and cycle routes within the Designed Landscape Zone. Draw up programme of work for infrastructure, including waymarking and interpretation.

4.2.4 OUTDOOR RECREATION / WILD LAND MANAGEMENT

Rationale

The Trust operates a policy of free and open access to all parts of Mar Lodge Estate, consistent with the Scottish Outdoor Access Code. According to the Cairngorms Mountain Recreation Survey (1999), almost three quarters of mountain users (71%) were of the opinion that access to the mountains should not change; that is be made neither easier or more difficult. A total of 81% agreed that there is “evidence of serious localised damage as a result of visitor numbers”, and 64% thought that this “could get worse”. Mountain users also agree that the use of bothies (87%) and people wild camping are traditional and important aspects of recreational trips, however 56% consider there to be serious problems caused by litter, fouling and misuse at bothies, and 38% at wild camping sites. The majority were in agreement that visitors spending the night out on the hill “need to be advised about appropriate behaviour”.

Objectives

To ensure, where possible, all recreational activities carried out within the wider Estate do not detract from the qualities of wild land (identified in 3.2.4.), and are compatible with the guiding principles of visitor management.

To ensure, where possible, all recreational activities carried out within the wider Estate do not detract from the enjoyment of others, and to encourage responsible behaviour which adheres to the principles of best practice as described in the Scottish Outdoor Access Code.

Actions:

Prepare and implement a camping management strategy for the wider estate.

Promote ‘Leave No Trace’ philosophy, and best practice as advocated by bodies such as Mountaineering Council for Scotland and Scottish Outdoor Access Code.

Prevent roadside camping within 200metres of the public road, and associated litter / open fires. Encourage co-operation through appropriate information / interpretation, and face-to-face engagement.

Implement a policy that ensures visitors keep their dogs under close control especially during the summer months when breeding birds and young deer are vulnerable.

Operate a 'Take your Litter Home' policy in all outdoor areas of the property.

Minimise any unnecessary vehicle journeys into the wider Estate.

Produce and implement best practice guidelines for the essential use of all-terrain vehicles beyond the limits of hard tracks.

Objective

Promote best practice for Outdoor Events and Sponsored walks, based on 'Outdoor Access Events Guidance' manual produced by Cairngorms National Park Authority.

Actions:

Operate best practice that presumes against large outdoor events in wider estate.

Consult closely with neighbours where proposed events cross ownership boundaries.

Objective

To avoid the need for any intrusive structures, and to consider the removal of any such structures that already detract from the wild land quality, unless there is an overriding conservation or management need.

Action:

Removal of cairns. Generally, cairns detract from wild land quality and are an unnecessary intrusion into the mountain landscape. Cairns will normally be dismantled, as a general rule during footpath repair and maintenance programmes, unless a clear potential for navigation and visitor safety, or cultural importance can be demonstrated. If any doubt, ensure consultation with the relevant Mountain Rescue Teams is carried out prior to removal.

PROVISION OF ACCESS.

Objective

Provide facilities and events which will enhance the visitors' experience of the Estate, and to encourage access on foot, by bicycle, by pony, or kayak within

appropriate management zones.

Actions:

Consistent with minimal vehicle use in the Wider Estate, develop methods of sustainable stalking, alongside other activities, involving the use of ponies, and overnight stays in the Wider Estate, as an enhancement to the field sports experience.

Support pedestrian and cycle links to Braemar, in conjunction with neighbours and other organisations, including the investigation of the provision of a new footbridge across the Dee, to increase the potential for 'low ground' circular routes to Braemar (as suggested in the Core Path Plan).

Identify and develop preferred walking and cycle routes within the Designed Landscape Zone. Draw up programme of work for infrastructure, including waymarking and interpretation.

Objective

Ensure all footpath and track restoration management is carried out with the prime purpose of landscape protection, rather than the facilitation of access per se.

Actions:

Carry out an annual mountain path maintenance programme.

Carry out a further footpath audit to ascertain requirements for further capital repair work, over and above annual maintenance, devise work programme and secure additional funding.

All future pathwork will continue to adopt the best design practice developed through contractors on upland sites, and 'light-touch techniques in areas of landscape or ecological sensitivity.

Consider further opportunities for hill track restoration on the Estate, should they arise, using innovative techniques developed during first phase of track removal.

Objective

Develop access opportunities for people of all abilities; for example through the provision of routes which are easily accessible by wheelchair and other visitors with limited mobility, and within buildings open to the public.

Actions:

Consult with disability providers and advisors, e.g. Fieldfare Trust, Woods for All, Disability Action to agree standards of design and best practise.

Extend wheelchair or all abilities routes at the Linn of Dee, adjacent to the car park, and provide viewpoint interpretation.

Provide disabled access and other appropriate disability provision in the following Estate buildings: Mar Lodge; The Stable Block; the Ballroom; Allanaquoich Steading.

Investigate the potential to offer assisted access into the glens within the Intermediate Zone, by the use of pony and cart.

BOTHIES

Objective

Establish a strategy for the sustainable use of bothies on the Estate, and mitigate against any negative impacts such as overcrowding, litter, pollution and human waste, through management agreements and monitoring.

Bob Scott's

Bob Scott's bothy is situated at the head of Glen Lui, a short distance from Derry Lodge. Built originally in the 1980's by a group of enthusiasts – 'The Friends of Bob Scott's' – in memory of the eponymous former Head Keeper of the Estate, who originally provided shelter for hillwalkers in the stable next to Luibeg Cottage, where Bob resided. The building was destroyed by an accidental fire in 2002, but following an approach from the 'Friends', an agreement was reached with the NTS to rebuild the bothy on the same footprint, to a similar design, but incorporating improved insulation and fireproofing. This presented an opportunity for a positive dialogue between the two parties, toward a more monitored approach to management, and the encouragement of responsible use.

The bothy operates on an 'open' basis for anyone to use. It should form a part of any discussion on the future of its neighbour, Derry Lodge, but it appears likely that it would continue to provide informal accommodation alongside a more managed facility in a rebuilt Derry.

Actions:

Continue to maintain a working partnership with the 'Friends of Bob Scott's' to promote responsible use of the bothy and the surrounding area of the Estate.

Corrour

Corrour Bothy is situated on the west side of a major right of way, the Lairig Ghru, at the foot of Coire Odhar by Devil's Point. Built originally in 1877 to house a 'deer-watcher', it is therefore of considerable cultural significance, more so than any other bothy on the Estate. Its use as a bothy first developed in the 1920's, and it was reconstructed in 1949, by members of Aberdeen's Cairngorm Club. When NTS took ownership of the Estate in 1995, problems of overcrowding, littering and pollution were evident.

The Trust now have a management lease in place with the Mountain Bothies Association, whose officers undertake regular monitoring and maintenance of the building, with assistance from Trust staff. In 2007, a substantial refurbishment was agreed, including the installation of an experimental toilet design to manage the problem of human waste in the area around the building.

Actions:

Continue to operate a maintenance lease with the Mountain Bothies Association to secure the condition of the building.

Assist the maintenance officers of the MBA to manage the experimental toilet facility by the removal of bags of composted human waste on an annual basis.

Monitor the use of the bothy, and encourage responsible 'Leave No Trace' behaviour.

Hutchison Memorial Hut

The Hutchison Hut was built in 1954 as a mountain shelter, and is situated in Coire Etchachan on a well used route to Loch Etchachan and Ben Macdui. It is also the subject of a maintenance lease with the MBA, and a refurbishment plan is in preparation.

Actions:

Continue to operate a maintenance lease with the Mountain Bothies Association to secure the condition of the building.

Agree a refurbishment plan and enable work to be carried out in 2012.

Monitor the use of the bothy, and encourage responsible 'Leave No Trace' behaviour.

Garbh Choire Shelter

Believed to have been erected in the 1960's by members of the University of Aberdeen's 'Lairig Club' to facilitate climbing trips into the corries of Braeriach, it is situated high in the Garbh Choire to the west of the Lairig Ghru, at an altitude of 715 metres. It is a very rudimentary structure, built from an iron frame, covered by jute sacking, with an outer rubble cover, and currently in a very poor condition. Its remote location, and consequently the relatively small number of visitors currently entering the Choire, leads to an absence of a clear path, making it notoriously difficult to locate in poor visibility, particularly for the inexperienced. This presents a poor safety argument for its retention as a refuge, given the relative close proximity of the Lairig Ghru path and Corrour bothy. Increased promotion of a refuge in the Garbh Choire as a destination in itself could initiate further path development into the corrie and consequent requirement for pathbuild, repair and maintenance, coupled with the inevitable associated issues of concentration of litter and human waste. The current very poor state of the structure effectively renders it not 'fit for purpose' – 'Repair' is therefore not a viable option – the structure would require replacement. Future maintenance would be very difficult to support, with a presumption against the use of vehicles in such a remote location. Had it never been erected, there is effectively no sound basis to build a shelter in this location – therefore its presence does not in itself constitute sufficient reason to justify continued existence. Taking the option to remove this ruinous and not particularly appealing structure would represent a rare and special opportunity to positively enhance the wild quality of the Cairngorms, in one of the most remote and wild corries in Britain, and a clear demonstration of the Trust's Wild Land Policy. Our proposal is therefore to recommend removal, with a suitable period of notice of such to the hillwalking community, and subsequent removal from new editions of the OS map.

Actions:

Recommend removal of the ruinous structure in the Garbh Choire, in accordance with Wild Land policy

Implement removal of structure following suitable period of announcement of intention, and subsequent withdrawal from new editions of the OS map.

4.2.4 EDUCATION AND INTERPRETATION

Management Principle (vii) of the Property Management Plan states: *“The NTS will share with the public an appreciation of the issues involved in managing the Estate as a wild land area, through appropriate interpretation and education”*

Section 2.3.6 of this plan summarises the work previously and currently carried out in the provision of education and interpretation. To date, the majority of this work has been undertaken by the Ranger and Ecology department, particularly the delivery of formal education, understandably as this is a specifically identified part of their workplans. Such is the complexity and ubiquity of education and interpretation in its capacity to reach out to visitors of all backgrounds and interests however, it is important that the delivery of this major aim is seen as one in which *all* staff at the property have an important role to play. All Estate staff should be given the opportunity to receive appropriate training to help them engage with visitors effectively, positively, safely and in accordance with best practise, and to enhance their own job satisfaction.

Education and interpretation programmes will aim to inspire, enthuse and inform.

The role of education and interpretation on the property is the subject of a recently completed and detailed plan document: *“Mar Lodge Estate - Education (Learning and Interpretation) Strategy, 2011”*. (Available as download from the NTS website) The main elements of this plan are therefore reproduced in summary here:

Educational and Interpretive Aims specific to Mar Lodge Estate:

- Provide opportunities for *all* visitors to the property to leave with an enhanced understanding and appreciation of the property and its special qualities.
- Promote the property as an example of best management practice, for the specific Management Principles as laid out in the Property Management Plan.
- Promote Mar Lodge Estate as a demonstration of integrated conservation management on a Scottish Highland Estate, particularly with regard to landscape, wildlife, access, and field sports.
- Provide learning opportunities specifically to local schools and community groups, to enhance their engagement with their local environment.
- Work in partnership with stakeholders to provide opportunities, and promote the use of the estate, for learning and for research which is both relevant and applied to issues specific to property management.
- Develop the potential of the property to provide a formal educational and training role, to enhance employment opportunities.

EDUCATION

Rationale

Learning is an investment activity, which is integral to both the Mar Lodge Estate and to the long-term aims of the Trust. Learning activity supports our conservation work whilst allowing the visitor access to the property.

Through formal education, school groups, community education groups, member groups of voluntary organisations and students in further education can be introduced to the Estate and the Trust's work either on site or through talks and other forms of communication.

Informal education, through talks/presentations, interpretation, publications, media articles and on site interaction provides a method of communicating the Trust's message to other visitor audiences in a less structured way.

Objectives

- Promote environmental awareness through engagement and targeted events.
- Find fresh and innovative ways to make education an enjoyable and enabling experience for the visitor.
- Offer learning experiences, which will be of the highest quality.
- Provide staff with structured training opportunities to encourage all staff to play a supporting role.

Actions:

Develop an awareness of the Trust's management of the estate through close links with local schools.

Identify relevant study topics and appropriate sites for visits to the Estate.

Continue regular 'Nature Club' activities for local children.

Provide work placements for students where these are relevant to their studies. Develop long-term placements to provide skills training and employment opportunities.

Work with young people on Award schemes such as the CNPA Junior Ranger Project, John Muir Award, Duke of Edinburgh Award to increase environmental awareness and skills, and promote compliance with Scottish Outdoor Access Code.

Work with SNH and others to facilitate research and monitoring within designated sites, on the management of the Estate and within the Cairngorms.

Develop resource packs and web-based educational materials, for primary, secondary and tertiary levels.

Re-draft a 'Research Register' for applied research projects, and encourage take-up from interested parties.

Increase opportunities for the use of the existing meeting room as a classroom / workshop for small study groups.

Where possible, provide workspace and accommodation for those undertaking site-based research, to ensure compliance with Estate policy on reduced vehicle access.

INTERPRETATION

Rationale

Interpretation is the process of communicating to visitors the significance and meaning of a particular site or subject. Effective interpretation is a valuable management tool, which can influence visitor movement and behaviour, and promote understanding. Good interpretive provision adds value to a visit and, therefore, increases visitor enjoyment.

In the words of Freeman Tilden:

"Through interpretation - understanding.

Through understanding - appreciation.

Through appreciation - protection"

All visitors to the Estate are a potential audience for interpretation, through a variety or range of different media. Some potential audiences are described in Section 2.1. 'Visitor Profile'.

Interpretation will be delivered through the most appropriate and effective methods. This will be influenced and directed by the Visitor Management Zones described in Section 3.5. There will, for example, be a presumption against 'on-site' interpretation such as panels and notices in the Wider Estate to reflect the Wild Land Policy; whilst more direct forms of interpretation will be deployed in centres of visitor activity such as Estate buildings and car parks. As stated elsewhere, it will be valuable to consider use of existing estate buildings for informal interpretation - Princess Louise's Tea Room, Old Deer Larder, for example - and investigate positive uses for Derry Lodge, which could include simple interpretation, or consideration of a sustainable 'educational facility' or outdoor classroom. (Needs evaluation as part of consultation / decision on future of Derry Lodge.)

A central theme for interpretation at Mar Lodge could be:

"Conservation management of a Highland landscape through the integration of multiple land uses."

Objectives

- Increase understanding and awareness of conservation and management of the Estate
- Enhance visitor appreciation and enjoyment of the property
- Promote the work of the Trust in conservation and countryside management, with particular emphasis to Mar Lodge, and encourage membership and support of NTS.
- Encourage responsible behaviour.

Actions:

Continue annual programme of walks / talks and events, where possible in partnership with others.

Identify target audiences of visitors to the Estate through the 'Management For People' programme, and develop a range of themes and topics for interpretation.

Review provision of *Information/ Interpretive Displays* on the Estate at:
Linn of Dee – with particular relevance to 'short-stay' visitors and low-ground walk routes.

Reception area of Lodge.

Basecamp

Develop dedicated Mar Lodge pages, including downloads as a learning resource, on the NTS main website – www.nts.org.uk

Produce regular news releases, articles and occasional research papers to disseminate information through the media to a wide audience.

Develop live wildlife images from remote cameras, (eagle eyries, for example) via wireless satellite links to Estate buildings and to websites.

Continue production of a *News-sheet*, weekly / fortnightly (depending on season) and distribute to local outlets.

Continue production of regular, updated '*What's Happening*' and '*What's About*' notices, posted at car parks and other visible locations.

Inform visitors of the importance of field sports on the Estate, through a range of media, including the trial of the online 'hillphone' system.

Re-design and produce new *Estate Leaflet* (original now on second reprint) to have one quality leaflet freely available, and widely distributed.

Invest in improved, and updated artwork and material for *mobile display*, which should be kept fresh and up-to-date. Look for other 'occasional' venues to take this display.

Review and re-design low cost interpretive boards currently outsourced to bothies and local outlets such as hostels.

Discuss with Aberdeenshire Council / CNPA / Mar Estate / , the provision of interpretive panels in Braemar road lay-bys overlooking the Estate, Quoich wetland, and viewpoint of the Cairngorms.

Target 'welcome' talks on day of arrival to guests in Lodge and Basecamp, or consider 'souvenir' DVD, depending on staffing resources.

Produce annual programme of volunteer opportunities – Thistle Camps; Trailblazer; Corporate Groups; NTS Conservation Volunteers.

Consider production of DVD on the work of NTS at Mar Lodge Estate, with reference to first 15 years, as replacement / addition to original video produced in 1997.

Produce programme / host workshops and seminars relevant to management issues and best practise.

Provide opportunities for visits from 'Outreach' programme – Disadvantaged / Ethnic minorities.

Maximise the potential for membership recruitment on the Estate - during events; on guided walks; site visits; in the car parking areas of Linn of Dee and Linn of Quoich.

4.3 PARTNERSHIP AND LIAISON

Rationale

Forming partnerships to enhance visitor management and carrying out liaison with user groups and others concerned will be an important component in achieving effective and acceptable visitor management on Mar Lodge Estate for the following reasons :

- Partnership and liaison will provide the Trust with opportunities to communicate its aims for the Estate to other parties and individuals, and through this communication and consultation, receive feedback from those with an interest in the management of the Estate. It is important that the Trust initiates and participates actively in such a two way process and that comments to the Trust are carefully considered in all cases.
- Visitor management issues, such as type and trends of use, impacts, sources of users etc, often extend outwith the boundaries of any single unit of land, however large, and thus have area-wide consequences. Similarly a management approach on one area of land may have implications over a wider area. Co-ordination of management activity with neighbouring landowners is therefore necessary, if visitor management is to be effective. A unified response to area or nation-wide issues, discussed and agreed between relevant parties in an area, will also be more effective than isolated action.
- Ensure visitor management is developed on a Cairngorm wide basis.

Objective

Maintain and develop links with the local community, with regard to tourism and other Estate management activities.

Actions:

Consult with the Braemar community on management issues of relevance to the economy through the Community Council, Tourism Group, Braemar Community Ltd., and organising open meetings.

Maintain a dialogue with the community through Community Council liaison / representation, and informally through Estate staff.

Co-organise activities for the visitor, such as guided walks / open days / ceilidhs, where possible to be a part of local events such as Braemar Gala Week, TGO challenge and Braemar Highland Gathering.

Attend significant local events, where appropriate with mobile display, such as the Braemar Gathering in September.

Organise periodic talks / lectures / site visits on the work of the Trust, either in the village or on the Estate, as an update of progress.

Endeavour to develop opportunities for local employment on the Estate.

Objective

Liaison with neighbours, user groups, relevant parties and individuals will be an important mechanism for the Trust in planning and implementing its visitor management plan for Mar Lodge Estate, and for monitoring its impacts and effectiveness. Partnership with organisations, neighbours or individuals may be an appropriate mechanism for tackling specific issues where a co-ordinated area-wide approach is required and for promoting integrated use of the Estate.

Actions:

Liaise closely with the local community to ensure that visitor management on the Estate is fully understood by local residents, and that their opinions can, where possible, be incorporated in the planning and implementation of a visitor management plan.

Liaise with identifiable user groups and recreation governing bodies to communicate the Trust's management aims, and to request their assistance and influence to promote sensitive and integrated user behaviour on the Estate.

To work closely with neighbours to attempt to resolve issues which require a broader, area-wide approach (for example, the provision of adequate campsite spaces in the Upper Deeside / Braemar area).

To become involved in existing area-wide initiatives addressing visitor and tourism issues.

To seek the support and partnership of bodies promoting good practice for outdoor recreational activities such as walking, camping and climbing, sporting activities, etc., which will be compatible with the management aims for the Estate.

Objective

Maintain and develop liaison and consultation with the Cairngorms National Park authority and neighbouring landowners within a Cairngorm wide forum.

Actions:

Hold regular meetings with staff of the Cairngorms National Park Authority to discuss areas of common interest.

Represent the Trust's view in workshops or discussion groups on issues such as access; conservation; sustainable tourism; environmental education.

Place Mar Lodge Estate in the 'Cairngorm wide' context when delivering

information and interpretation.

Work with the Cairngorms Outdoor Access Trust on the management and maintenance of footpath networks across the Cairngorms.

Liaise with the Cairngorms Outdoor Access Forum on access issues within the Cairngorm area.

Use the Cairngorm Rangers forum as a sharing of ideas for best practice, and co-ordination of resources.

Objective

Maintain regular liaison with Scottish Natural Heritage as part of the Mar Lodge Estate Management Agreement in place between the two organisations.

Actions:

Meet Key Performance Indicators for visitor management, as defined within the Property Management Plan.

Meet advanced standards for re-notification of new Mar Lodge National Nature Reserve.

4.4 STAFFING AND RESOURCING

Rationale

It may not be possible to deliver all desirable actions within the first five years of this plan. A costed, timetabled workplan is essential, and priorities established in order to justify the staffing and financial resources required, both for essential management and for individual projects.

Objective

Where an operational or business case is made, ensure sufficient financial and staff resources to deliver Estate objectives and actions.

Action:

Secure sufficient financial and staffing resources for the delivery of projects through the production of properly costed and timetabled workplans.

Objective

Ensure that all Estate staff receive appropriate training to help them deliver their role effectively, positively, safely and in accordance with best practise, and to enhance job satisfaction.

Actions:

Identify training needs, collectively and individually, through performance review and other internal initiatives.

Ensure Visitor Management is seen as a role in which all staff have an important part to play.

Encourage attendance of staff at conferences, seminars and workshops, where this provides relevant training or opportunities for partnership working and reputation.

Encourage involvement, and empower Estate staff as trainers to provide skills training and passing on of knowledge to work placement students, to outside groups and to other staff.

5. MONITORING & FEEDBACK

5.1 Further Survey

Objective

Work in partnership to carry out attitudinal and behavioural surveys of visitors throughout the Cairngorm area, to provide a database for management.

Action:

Commission, in partnership with others, an economic appraisal of visitor activity undertaken on the Estate in relation to Braemar and Upper Deeside

5.2 Monitoring

Rationale

From a Health and Safety perspective, to give due regard to visitor safety, some structures will require to be monitored at given intervals, and an assessment of their condition made. This will specifically apply to buildings and to footbridges, for which a condition survey is in preparation. The NTS Health & Safety policy (see 3.2.3.) requires that risk assessments must be carried out to cover all areas of activity on the Estate.

Objective

Monitor structures to ensure the safety of visitors, according to health and safety policy

Actions:

Carry out regular inspections of buildings used by visitors and implement remedial works as necessary

Carry out regular inspections of footbridges on the Estate, in addition to a five-yearly condition survey.

Carry out regular inspections of footpaths on the Estate, as part of an annual maintenance programme.

Rationale

The monitoring of vehicle numbers is carried out by an automatic counter beneath the road surface at the Linn of Dee car park entrance. This information currently provides the best estimate of total numbers of visitors arriving at Mar Lodge Estate. An additional, more sophisticated counter, operated by Aberdeenshire Council, is still in place beneath the highway on the approach to Linn of Dee, but has been inoperational for a number of years, due to Council cutbacks. New data from this counter, if still serviceable, would be valuable as a comparison with data from ten years ago to detect trends. Further vehicle counters may need to be considered if additional traffic flows within the Estate are developed.

The previous system of pedestrian counters at strategic points on the wider estate provided valuable data on the numbers and movements of walkers. Due to the age and subsequent breakdown of equipment, and a lack of staff time to maintain and monitor, this network of counters was removed. Following review, it is intended to re-install a fresh network of pedestrian counters at similarly strategic locations around the Estate, and collect new, comparable data. This is intended to be carried out in 2012, and resources allocated accordingly.

A number of areas of visitor activity are identified in the plan to be monitored.

Objective

Evaluate and review the effectiveness of visitor management through monitoring.

Actions:

Collect data on vehicle numbers entering Linn of Dee car park.

Consult with Aberdeenshire Council to seek reinstatement of automatic sub-surface directional traffic counter on approach to Linn of Dee.

Consider additional traffic counters, or methods of counting vehicles, within Designed Landscape Zone if additional traffic flows established.

Review the collection of information on pedestrian visitor movements; site new counters accordingly, and collect data on regular basis.

Monitor numbers of tents, and camping issues at specific locations including Derry Lodge

5.3 Evaluation

Rationale

Feedback is an important part of evaluating the effectiveness of management, although it is often overlooked, or not enough time allocated to carrying out the process.

Wherever possible, visitors should be encouraged to give an evaluation of their experience, or of visitor facilities. This is most easily achieved with a 'captive' audience, such as residential guests; field sports clients; educational groups; visitors on guided walks or events, through a simple questionnaire or pro-forma. From time to time, it may be necessary to formulate questionnaire surveys for groups of visitors undertaking specific activities in the outdoors in order to identify new management actions through attitudinal responses. Ideally this would be carried out prior to a review of the visitor management plan.

Action:

Carry out an evaluation surveys of visitor opinion on facilities and interpretation, for a future plan review.

6. ORGANISATION

A timetabled and costed WORKPLAN will appear in this section in Final Draft.



the National Trust
for Scotland
a place for everyone

IV

Mar Lodge Estate Deer Management Plan 2012

Introduction

The current Mar Lodge Estate Deer Management Plan (DMP) was last redrafted in 2010, as part of the process leading to the signing of a Section 7 control agreement between NTS and SNH.

Following publication of the Mar Lodge Estate Independent Review (IR) in November 2011, a reappraisal was undertaken of the DMP.

This concluded that, fundamentally, the IR did not change any of the objectives of the DMP, nor did it change ANY of the targets. What does change are some of the detailed tactics to be employed to deliver these objectives.

These tactics include additional use of fencing to provide strategic barriers to deer movement and attempt to funnel deer into areas where plantation woodland has been opened up for shelter. Such measures are detailed in the Whole Estate Forest Plan, and will also be dealt with in detail as part of the Moorland Management Plan.

There is one amendment required to the DMP which relates to ongoing risks. The current plan identifies the fact that continued culling in the regeneration zone could lead to a decline in population on the wider estate that would prevent sporting targets being met. The plan as it stands suggests that if this stage were reached then targets would be reviewed (downwards presumably) for the wider estate. It has now been decided not to pursue such an option but to employ different tactics, such as using limited strategic fencing, to ensure all our targets can be met.

The Deer Management Plan 2010 is included here for reference. The changes required to this plan will be subject to discussion by the Mar Lodge Estate Section 7 Steering Group, and a revised plan will be published late in 2012, once the nature of these changes has been discussed in detail.

V

Mar Lodge Estate

Riparian and Hydrological Habitat Action Plan November 2010

Drafted by:
M. Flagmeier: Mar Lodge Seasonal Ecologist
S. Rao: Mar Lodge Ecologist

Contents

1. Introduction	3	
2. Management objectives and approach	3	
3. River Dee within Mar Lodge Estate	4	
4. Designations relevant to the River Dee	5-6	
5. Assets potentially affected by riverine processes	5	
<i>5.1 Scheduled ancient monuments</i>		<i>7</i>
<i>5.2 Bridges</i>	<i>7</i>	
<i>5.3 Fords</i>	<i>7</i>	
<i>5.4 Fences</i>	<i>8</i>	
<i>5.5 Building</i>	<i>7</i>	
<i>5.6 Tracks</i>	<i>9</i>	
<i>5.7 Species and habitats</i>	<i>9</i>	
<i>5.8 Electricity poles</i>	<i>10</i>	
<i>5.9 Plantations/woodlands</i>	<i>10</i>	
<i>5.10 Grazing land</i>	<i>10</i>	
<i>5.11 Estate boundary</i>	<i>10</i>	
<i>5.12 Woody debris</i>	<i>11</i>	
<i>5.13 Public roads</i>	<i>11</i>	
6. Construction method statements & mitigation	11	
7. Consents and licensing	11	
8. River Restoration	12	
9. Conclusion	12	
10. Contacts		13
11. References		15

1. Introduction

This plan fulfils an action from the Mar Lodge Estate Management Plan 2006-2011. This action (1.10) is “to produce and implement Habitat Action Plans for riparian and wetland areas of the estate and to complete a Hydrological Action Plan”. The purpose of this action is to help meet two of the conservation natural heritage objectives within the management plan:

Objective 1: “to continue to enhance the key habitats and species at Mar Lodge Estate (...)” and Objective 2 “to demonstrate a sustainable approach to flood management with respect to protecting and enhancing geological features and natural geomorphological processes”.

This Riparian and Hydrological Action plan was preceded in 2004 by a Hydrological Action Plan document that reached a final draft but was never completed. This detailed document covered the structural engineering works and historical management of the rivers within Mar Lodge along with potential risks to infrastructure, archaeology and habitats from riverine processes and the implications for removal, decay and or maintenance of flood defences. This plan aims to take forward the ideas spawning from the 2004 plan to provide a more overarching, succinct and practical document that provides an overview of the riparian and hydrological issues within Mar Lodge Estate, including management guidance.

2. Management objectives and approach

The objective of this plan is to:

- a) describe the approach to the management of riparian and wetland habitats.
- b) to assess the effects of the river Dee processes on natural and cultural assets of the estate.
- c) develop subsequent actions to guide the management approach.
- d) allow for the restoration of natural processes and the connectivity between the river and its floodplain where these have been lost due to previous intervention.

A responsive rather than prescriptive approach will be taken to the management of the hydrology and riparian/wetland habitats within the whole estate. In line with the management of the wider estate, a general management approach of minimum intervention will be followed in which natural processes of the riverine wetland habitats are allowed to occur. The default management position in response to dynamic riverine processes will be to do nothing. Action will only be taken where there is a risk to the infrastructure and/or assets of the estate. This would include tracks, buildings, bridges, Scheduled Ancient Monuments (SAMs), roads, electricity poles, woodland and fences. The response to natural events will be in proportion to the importance/significance of the asset that is at risk. In the likelihood of an asset being at risk the following hierarchy of actions will be considered always in the following order: 1. Managed retreat, 2. “Green” sensitive engineering*, 3. Soft engineering* and 4. Hard engineering. However options 3. and 4. will only be considered for assets that are essential or of significant financial/cultural value to the estate (e.g. buildings/bridges) and not for assets such as woodland and fences. Where opportunities arise to improve the natural effects of the river system or to restore degraded riparian habitat these will be considered and supported if they assist in achieving property objectives.

* Green [engineering](#) is the process and design of products that conserve natural resources, and impact the natural environment as little as possible. Soft engineering – use of ecological principles and practises to reduce erosion and achieve stabilisation of shoreline/riverbank areas while enhancing habitat, improving aesthetics and saving money (uses vegetation and other material).

3. River Dee within Mar Lodge Estate

- all waterways in Mar Lodge within the River Dee catchment.
- 29.3 km of the River Dee within the estate.
- Ranges in altitude from 330m at Invercauld March to 820m at the Pools of Dee.

4. Designations relevant to the River Dee

Designation	Title	Type of Designation	Reason for Designation	Area of estate covered
Special Area of Conservation (SAC)	1. River Dee 2. Cairngorm	European	1. Otter, freshwater pearl mussel & Atlantic salmon 2. 14 Annex 1 habitats including North atlantic wet heath, alpine and boreal heath, European dry heath, Caledonian forest, blanket bog & juniper	River Dee, Geusachan burn, Geldie burn, Allt Dhaidh Mor, Bynack burn, Allt Bhronn, Allt-an-Seilich, Lui water, Derry burn, Luibeg burn, lower Quoich 2. northern part of Mar Lodge Estate plus Glen Lui and Quoich
Special Protected Area (SPA)	Cairngorm	European	Golden eagle, peregrine falcon, merlin, osprey, Scottish crossbill, capercaillie & dotterel	Northern part of Mar Lodge Estate plus Glen Lui, Glen Quoich & Pinewood plantation
Site of Special Scientific Interest (SSSI)	1. Cairngorms 2. Eastern Cairngorms	UK	1. Alpine heath Alpine moss heath and associated vegetation, Breeding bird assemblage, Bryophyte assemblage Dotterel (<i>Charadrius morinellus</i>) breeding, Flies, Fluvial Geomorphology of Scotland Fungi assemblage, Golden eagle (<i>Aquila chrysaetos</i>) breeding, Invertebrate assemblage Lichen assemblage, Mineralogy of Scotland, Native pinewood Oligotrophic loch, Ptarmigan (<i>Lagopus muta</i>), breeding Quaternary of Scotland Snow bunting (<i>Plectrophenax nivalis</i>), breeding, Snowbed Subalpine dry heath, Vascular plant assemblage 2. Alpine moss heath and	Northern part of Mar Lodge Estate plus Glen Lui, Glen Quoich & Quoich water fan

			associated vegetation Arctic charr (<i>Salvelinus alpinus</i>) Breeding bird assemblage Bryophyte assemblage Dystrophic and oligotrophic loch types present, Flies, Fluvial Geomorphology of Scotland Invertebrate assemblage, Native pinewood, Quaternary of Scotland Snowbed Subalpine dry heath Vascular plant assemblage	
National Nature Reserve	Cairngorms	UK		North west corner of Mare Lodge Estate. Extending south and east to Glen Derry and Derry Lodge
National Scenic Area (NSA)	1.Cairngorm Mountains 2.Deeside and Lochnagar	UK		Whole of estate north of the Geldie burn and the Allt Cristie Beag
RAMSAR	Cairngorms Lochs	European	Oligotrophic lochs -wetlands of international importance	Loch Etchachan, Lochan Uiane (Sputan Dearg)
Geological Conservation Review Sites	Cairngorms Quaternary, Derry Burn, Luibeg burn & Quoich water fan	UK	Quaternary, Fluvial geomorphology	Cairngorm mountains, lower sections of Derry and Luibeg burns & Quoich water below road bridge
Scheduled Ancient Monuments	Derry Bridge, Alltan na Beinne & Mar Shielings, Lui water and Mar Townships	UK	Legally protected monuments of national importance	Dee valley, Glen Lui, Upper Glen Derry, Upper Glen Quoich
Cairngorms National Park			Special natural and cultural heritage	Whole of estate

5. Assets potentially affected by riverine processes.

5.1 Scheduled Ancient Monuments (SAMs) and other archaeological sites

Some SAMs and archaeological sites are found alongside riverine areas upstream of the Linn of Dee, Quoich bridge and Lui bridge (Map 1.). While none of these appear in immediate danger, they may be susceptible to unpredictable flood damage as well as erosion in the longer term caused by natural geomorphological processes of the river. All SAM sites have been mapped and documented in detail. Any changes due to natural processes should be recorded and where time allows responsive actions developed as necessary (See Action 1.1a). The Historic Scotland/NTS management agreement and the designation priorities between SAMs and the river Dee SAC should be taken into account when developing responsive management action.

It is possible that a natural event could occur whereupon there is no time to consult about appropriate management action. It is also possible that a natural event could uncover an archaeological site that was previously unknown. A strategy will be developed between Mar Lodge Estate and NTS archaeologists (Action 1.1b) to deal with such situations and this may involve agreeing that some archaeological sites can be lost to natural events whereas others must be protected.

All actions will be assigned to National Trust for Scotland (NTS) staff and integrated with existing monitoring programs where possible.

Action 5.1a: Monitor SAMs every 5 years with fixed point photographs. Existing photographs held by the NTS archaeologist should be taken into account as a baseline.

Action 5.1b: Agree a strategy between MLE and NTS archaeologists to deal with sudden natural events that pose an immediate threat to SAMs.

5.2 Bridges

Frequent flooding events could lead to the erosion of river banks that support bridges as well as directly affecting bridge foundations. Existing bridges are essential for estate work and estate/public access and hence in the event of damage, bridges will be maintained.

Action 5.2: Monitor bridges annually for signs of erosion/structural damage.

5.3 Fords

Intervention to clear fords will be kept at a minimum to allow natural processes of sedimentation and consequent river movement. Where work is required to be carried out, we will seek advice (eg from the River Restoration Centre) on reworking fords so that they are maintained by fluvial processes and minimal intervention is required. If material must be cleared from fords then this will be retained in the river and simply moved downstream of

the crossing. Work will also be carried out “little and often” as this will reduce the impact of the work and minimise the amount of fine material washed downstream during maintenance.

5.4 Fences

When natural riverine processes put fences at risk then the situation will be managed according to the hierarchy of actions outlined in section 2. except that actions 3. and 4. will not be considered. It is envisaged that a “managed retreat” or “green sensitive engineering” action will always be possible to protect fencing. In the short term the only fences on the estate considered at risk from riverine processes are the fence 1. around the plantation north of the river Dee between the Lui confluence and Claybokie (see Map 2: fence 2) and 2. around the first new native woodland scheme on the Derry Lodge track between the Derry gate and Black bridge (see Map 2: fence 1). Fence 2. has been protected since 1997 by a boulder and tree trunk blockade but there is now erosion to the bank both above and below the blockade (Map 2). Through natural processes the Lui water is eating away at the bank near fence 1 (Map 2: fence 1). In both these cases the “managed retreat” option will be followed and the fence lines will be moved in the near future and the blockades protecting fence 1 will be allowed to decay.

Action 5.4: Move fence lines to avoid damage.

5.5 Buildings

The only estate buildings at risk of flooding within the lifetime of this plan are Mar Lodge and the surrounding buildings on the Dee floodplain. The area of floodplain around Mar Lodge is protected by a flood embankment along the river which dates back to at least 1869. Some of the original embankments between the suspension bridge upstream of Mar Lodge and Victoria Bridge have been substituted with stake and boards structures. A number of aging signs are present on the flood embankment including undercutting, slumping, erosion and water seepage through the bank during high water. These areas of flood bank deterioration have been noted and they should be surveyed regularly (see Map 3: Embankment 1). The areas where water flows through should be repaired to prevent any further damage. All embankments in this section should be kept and well maintained to protect Mar Lodge and surrounding buildings. Where flood bank repairs are required then the River Restoration Centre will be contacted for advice on how these banks could be repaired ideally using “green sensitive” or soft engineering rather than a “hard engineering” solution. The River Dee Catchment Management Partnership will also be approached for support and for opportunities to access funding.

In the longer term non-Mar Lodge buildings could be put at risk by natural riverine processes. Decay of embankments on the south side of the Dee below the Linn of Dee could affect Muir Cottage, the Youth Hostel and Woodside residence (Map 3: Embankments 2 & 3). Similarly, the natural decay of the flood embankment in the Quoich wetlands could also eventually impact Allanmore Cottage on Invercauld Estate (Map 4: Embankments 5 & 6).

Action 5.5a: Initially survey the embankment weaknesses stated above (pre-action).

Action 5.5b: Repair embankment where necessary to avoid damage to Mar Lodge buildings.

Action 5.5c: Monitor embankments annually by fixed point photographs.

Action 5.5d: Liase with Mar Estate regarding possible effects of decay of embankments near Muir Cottage

Action 5.5e: Liase with Invercauld Estate with regard to possible effects on Allanmore Cottage.

5.6 Tracks

Many estate tracks run alongside rivers and could be affected by erosion. At present there are risks to the Geldie Lodge track and the Glen Quoich track (west)(Map 5). Sources of material for track repair will be agreed with SNH if from within the estate or will be purchased from out with the estate. No materials will be taken for road repair from the river, or within the SAC, SAMs or GCR sites (see Maps 1, 6 & 7). Where tracks are considered essential for estate management then the response taken to tracks put at risk from natural processes will follow the hierarchy outline in section 2.

Action 5.6: Carry out check of tracks as impacted by erosion, could be done in conjunction with any existing checks of tracks.

5.7 Species and habitats

Changes will occur to the riparian corridor throughout the estate by natural riverine processes. In general there will be no actions taken to prevent fluctuations in species numbers, habitat changes and/or the suite of species present as a result of natural geomorphological processes. However changes may fall within designated areas and/or affect species or habitats considered important in conservation terms.

The river Dee SAC is designated for Atlantic salmon, fresh water pearl mussels and otter. There is some proposed riparian woodland restoration work for the Dee to benefit salmon (see section 9: River Restoration). There are no records of fresh water pearl mussel within Mar Lodge Estate but a survey in 2002 stated that there is suitable habitat. For this reason, the estate should ensure no management action conducted in relation to the river allows sediment release into the river as this would not be beneficial to any freshwater pearl mussels should they occur or salmon. Otters are adaptable to the natural changes that occur in river systems. However, the estate should ensure there is no disturbance to otters and in particular otter holts when carrying out work in and around the rivers.

A previous invertebrate survey has highlighted the importance of the river shingles for invertebrates. The estate is keen to preserve the shingles and make sure their dynamism continues. Allowing uninterrupted natural riverine processes to occur should ensure this.

The Quoich wetland area which is the floodplain supports a thriving population of waders. This population had increased in recent years as a result of some wetland restoration work that involved drain blocking and dam creation. Overall numbers of waders have increased as have the relative numbers of each species. Allowing the floodbank on the river Dee to naturally decay will reconnect the floodplain with the river and it is likely to increase in

wetness through more regular inundation. This is likely to influence the numbers of different wader species occurring but will hopefully not decrease the overall diversity of the site.

The Quoich wetland also supports a birch woodland which currently shows no signs of regeneration due to the grazing impact. The estate needs to look into options for the future of this birch woodland along with the rest of the floodplain which has the potential to succeed from floodplain to riparian/wet woodland depending on influencing factors (seed sources, plant and animal interactions as well as the length and severity of flooding events). While the current focus of deer management is on the pinewood regeneration, options for managing deer to allow regeneration of the wetland woodlands needs to start being considered.

The riverbank of the Inverey plantation behind Muir Cottage supports a suite of toothed fungi species of conservation importance. The site is currently high up on the bank and does not appear under threat in the short term.

Action 5.7a: Carry out fixed point photograph monitoring of broad habitat changes every 5 years.

Action 5.7b: Identify species and habitats of conservation concern and locally important species, especially with regard to the river Dee SAC and liaise with SNH/species group experts.

5.8 Electricity poles

The embankment east of Craggan House (see Map 4: Embankment 4) has been affected by erosion, resulting in flooding onto the land behind the embankment (Craggan Park) during winter and high flow. There will be no intervention here to prevent natural processes. However, this poses a risk to the electricity poles that cross the river. Further downstream in the Quoich wetlands area, the embankment protecting the Allanaquoich pastures and birch woodland, has been affected by erosion in three places (see Map 4: erosion areas). Again there is a possible risk to electricity poles in that area.

Action 5.8: Allow natural processes to take place. Liaise with electricity board over a monitoring and course of action for the electricity poles affected by natural geomorphological processes of the river.

5.9 Plantations/Woodlands

In general erosion of riverbanks in woodland areas will be allowed to occur naturally unless a fence or some other built structure is affected. There are various places throughout the estate where trees may fall into the river as a result of bank erosion. At present one plantation, the Craggan wood is at immediate risk from riverine processes. The embankment east of Craggan House (see Map 4: Embankment 4)) has been affected by erosion, resulting in flooding onto the land behind the embankment during winter and high flow. This is causing undercutting of Craggan wood, with a subsequent loss of trees and further de-stabilisation of the river bank.

Action 5.9: Accept loss of trees in Craggan Wood and subsequent erosion of the riverbank

5.10 Grazing land

The only grazing land at risk in the lifetime of this plan from natural riverine processes is the land at the Quoich wetlands. The Allanaquoich pastures and Craggan park are likely to become less suitable for grazing over time as the area becomes increasingly wet through frequent breaching and natural decay of the flood embankments. A detailed explanation of the future management of these areas is available in the Farmland Management plan.

5.11 Estate boundary

The centre of the river Dee between Claybokie and the Quoich wetlands defines the boundary of Mar Lodge Estate with Mar Estate. Changing the river course could have impacts on this boundary, with possible loss of ground for either party.

Action 5.11a: Liase with Mar Estate over changing boundary issues should the river be observed to significantly change course.

Action 5.11b: Seek legal advice on the implications of river course change on ownership boundaries.

5.12 Woody debris

It is recognised woody debris provides important benefits to the riverine habitat. The general presumption will be to leave such debris within the river. Where woody debris is being considered for removal because it is thought to be creating a hazard or risk to estate assets or the public, this rationale will be supported by a hydrological assessment. Options for repositioning woody debris to reduce the risk or hazard will be considered before removal which will be the least favourable option.

5.13 Public roads

The bank which runs near to the public road between the Linn of Dee and the suspension bridge upstream of Mar Lodge is actively eroding and this could ultimately affect the public road (see Map 3:erosion area 4).

Action 5.13: Inform Aberdeenshire Council for them to put monitoring and possible repair in place.

5.14 Geology

The estate includes four geological conservation review sites (GCR) (Map 7), three of which are specific to rivers (see Table 1.). There were selected as sites of geological importance for their representation of the fluvial geomorphology of Scotland and Quaternary features. Although the boundaries of the GCR sites do not match those of the Cairngorms and Eastern Cairngorms SSSIs exactly (Map 8), the GCR sites do underpin features within the SSSIs. The

Quoich fan underpins the Fluvial Geomorphology of Scotland feature of the Eastern Cairngorms SSSI and the Luibeg and Derry burns underpin the Fluvial Geomorphology of Scotland feature of the Cairngorms SSSI. Similarly, the Cairngorms GCR underpins the Quaternary features at both SSSIs. The estate must ensure that SSSI consent is obtained for any works proposed within the areas of the GCR sites that fall within the SSSI boundaries. Although there are areas of the GCR sites that fall out with the SSSI boundaries the estate would also pass any proposals of work in these areas to SNH for comment.

6. Construction Method Statements and Mitigation

Where works are required within the riparian corridor to maintain infrastructure or secure assets then mitigating action will be taken to ensure there are no negative impacts on the river system.

Some works may require a licence (see below) in which case the licence procedure will be followed. For minor works where a licence is not required but the work could affect the interests of the River Dee SAC, or otters (European protected species), a method statement will still be produced for each action which will outline the work planned, timescale, potential impacts and mitigating measures. Guidance for actions will be drawn from the SNH Good Practice Guidance and SEPAs Pollution Prevention Guidelines (PPG5 Works and maintenance in or near water). This method statement will be submitted to SNH for approval before commencing work.

7. Consents and Licensing

A licence or registration under The Water Environment (Controlled Activities) (Scotland) Regulations 2005 may be required for any works in or around water courses. SEPA will be consulted on the need for a licence for any individual projects that may fall into this category.

For more major works such as bridge building, planning consent may be required. In this situation the Local Planning Department will be consulted and the correct procedures for securing planning permission will be followed.

8. River Restoration

Options for restoring riparian habitats and reconnecting the river with its natural floodplain will be actively considered on the estate. Aberdeenshire Council is leading a project along with The Dee Catchment Management Partnership and the estates, investigating options for restoration of the connectivity between the river and its floodplain between the Linn of Dee and Braemar. In particular they are looking at the removal of a cast iron revetment which was built in 1974 (Map 4: man-made blockade). Currently an environmental impact assessment of the revetment removal is being carried out. Removal of this revetment is likely to have implications for the future course of the river Dee. The Trust is currently involved and supportive of this proposal. This plan will be updated once the assessment has been completed.

Mar Lodge Estate is also involved with a collaborative project (Dee Trust, CNPA, other upper Dee Estates) to restore riparian woodland to the upper Dee Catchment. Evidence suggests that the water temperatures in the River Dee have risen and are reaching lethal temperatures on days in summer for salmon. Proposals are currently being drawn up to restore riparian woodland to the Upper Dee which will help salmon by reducing water temperature but also have wider biodiversity benefits. The Trust is supportive of this project and this plan will be updated once the project plan is completed.

Action 8.1: Continue support and involvement in the revetment removal project.

Action 8.2: Update this plan once the environmental impact assessment of the revetment removal is complete.

Action 8.3: Continue support and involvement in the Upper Dee Riparian Project.

Action 8.4: Update this plan once the Upper Dee Riparian Project plans and the Mar Lodge Whole Estate Forest plan are complete.

9. Conclusion

This plan should be agreed with SNH and SEPA to liase e.g. with SEPA for compliance with the Dee Catchment Management Plan and SNH with regard to the river Dee SAC, natural heritage and management of the estate. Legal advice should be sought on liability to neighbours and others of not maintaining flood defences in particular areas. A second draft of the plan should be sent out for comments including neighbours, Aberdeenshire Council and Dee and District Salmon Fisheries Board. Finalise plan agreed with statutory bodies, other interested parties and neighbouring estates.

10. Contacts

Aberdeenshire Council – To be contacted about effects of the river on public roads. Also provides flood emergency advice and contacts and are part of the North East Scotland Flood Liaison and Advice Group (NESFLAG) to share knowledge and understanding of flooding issues.

Aberdeenshire Council
Woodhill House
Westburn Road
Aberdeen
AB16 5GB
Tel: 08456 08 12 07
NESFLAG and Policy: Maurice Stack
Tel: 01224 664570

Dee and District Salmon Fisheries Board
Mark Bilsby – Director

4 Mill of Dinnet
Dinnet, Aboyne AB34 5LA
Tel: 01339 880411
Email: mbilsby@ddsfb.co.uk

Historic Scotland – for advice on SAMs

Longmore House
Salisbury Place
Edinburgh EH9 1SH

Scheduled Monument Consent
Email: hs.inspectorate@scotland.gsi.gov.uk
Tel: 0131 668 8770

Invercauld Estate

4 The Keiloch
Invercauld
Ballater AB35 5TW
Tel: 013397 41224
Fax: 013397 41252
E-mail: office@invercauld.org

Mar Estate

c/o Mark Nicolson
13A Brechin Place
LONDON
SW7 4QB

Scottish and Southern Energy

Inveralmond House
200 Dunkeld Road
Perth PH1 3AQ
T: +44 (0)1738 456000
Email: info@scottish-southern.co.uk

Scottish Environment Protection Agency

SEPA Corporate Office
Erskine Court
Castle Business Park
STIRLING
FK9 4TRTel: 01786 457700
Fax: 01786 446885

Scottish Natural Heritage

Great Glen House
Leachkin Road
Inverness

IV3 8NW
Tel: 01463 725000
Fax: 01463 725067

RSPB – carried out the bird and vegetation survey (Dr Una Urquhart and Dr Ian Francis) of the Quoich Wetland
East Scotland Regional Office
10 Albyn Terrace
Aberdeen
Aberdeenshire
AB10 1YP
Tel: 01224 624824

10. References

Mar Lodge Estate Management Plan 2006-2011
Hydrological Action Plan 2004
Dee Catchment Management Plan
Upper Dee Riparian Woodland Plan
Dee Floodplain Restoration Project (in progress)

VI

MAR LODGE ESTATE FARMLAND MANAGEMENT PLAN (2011-2016)

1) INTRODUCTION

Mar Lodge Estate supports land, mainly along the river Dee, which has been historically and is currently managed as “farmland”. In addition many areas of the wider estate have been used in the past for extensive upland summer grazing. The areas of current farmland along the main Dee valley are closely inter-twined with other habitats such as new and established woodland, river shingles, wetland and grassland. Together these habitats form a diverse landscape, rich in biodiversity and supporting many species of conservation value. The farmland also contributes significantly to the local landscape providing the fertile green foreground to the dramatic backdrop of the high peaks of the Cairngorms as you drive out of Braemar towards Mar Lodge. Finally the farmland is of cultural heritage value as it still retains some of the characteristics and features of historic upland farming systems.

Since the National Trust for Scotland (NTS) acquired the estate in 1995 there has been no collective assessment of how this farmland should be managed and what the future priorities are for this farmland. This Farmland Action Plan (FAP) details an assessment of the farmland areas and forms part of the output from Key Performance Indicator 3 under the Nature Conservation Objective 1 within the current management plan. The plan details the objectives of farmland management within the estate, outlines the important natural and cultural heritage features supported on the ground and describes the management actions that will be adopted with the accompanying rationale. For the purposes of the plan the farmland has been zoned as different objectives and constraints apply to different areas of farmland (Map 1). However, the overarching approach to management of the farmland will be guided by the Estate’s management principles, the principle aim of which is to **“managing the Estate in a sustainable manner, ensuring continuing conservation and restoration of its internationally important geology, flora, fauna, wild land quality and archaeological value.”**

2) GRAZING

The grazing within Mar Lodge Estate has in recent years been leased under a series of seasonal lets to a local farmer. There is a need to retain a grazing or cutting component to the estate in order to keep the areas around the lodge in good visual order and for other reasons outlined in this plan. The management required for the future will be achieved either in-house, through a seasonal let, by using contractors or a combination of these options. Once the grazing requirements for the different zones have been finalised all the grazing will be brought together in a grazing management plan for the estate.

3) FARMLAND AREAS

Table 1. List of farmland areas, size and designations (see also map 1)

Zone	Site	Grid Ref.	Size Ha (approx.)	Designations
A	1. Little Inverey	NO084 896	21.28	a. National Scenic Area b. 4. within SAC
	2. Loin a Veach paddock	NO086 890	1.5	
	3. Claybokie paddock	NO088 898	5.8	
	4. Field upstream of Claybokie	NO078 898	2.6	
B	1. Fields within Mar Lodge policies	NO098 898	32.4	a. National Scenic Area
C	1. Craggan	NO110 900	24.3	a. National Scenic Area b. 1. & 2. within SAC Quoich fan: c. Special protection area d. Site of Special Scientific Interest
	2. Quoich wetlands (unfenced)	NO116905	48.8	
	3. Quoich wetlands (fenced fields)	NO124 913	45.6	
D	1. Areas of the wider estate suitable for extensive grazing		29166ha approx.	a. National Scenic Area b. Special protection area c. Site of Special Scientific Interest d. Special Area of Conservation e. Scheduled Ancient Monuments

4) SITE DESCRIPTION AND MANAGEMENT ACTIONS

4.1) Zone A

1. Little Inverey

Background – This is the only farmland on the estate that still retains the historical field system of small-scale strip fields with associated steadings dating back to 1800. The area was used for arable farming until the 1980's after which it was no longer ploughed and only used for rough grazing. The area is ring fenced by a deer fence but the internal fences and boundaries are in poor condition. The fields are unimproved to semi-improved but variable in quality across the site. One field and other small areas lie outside the main deer fence. The area is frequently used by wading birds such as oystercatcher and curlew. A vegetation survey (Robinson 2009) has been conducted of one of the fields out with the ring fence and this revealed a relatively diverse sward but no particular vascular plant rarities. Wildflower species were numerous, including common violet and birds foot trefoil suggesting this area may be important for butterflies.

Objectives - Little Inverey is the best example on the estate of traditional field systems and as a result of this, the main objective for Little Inverey is to retain and conserve the cultural heritage. However, this area also has considerable biodiversity interest (see above) so a secondary objective will be to maintain and enhance where possible the biodiversity interest while still retaining the cultural heritage.

2. Loin a Veach paddock, Field upstream of Claybokie and Claybokie paddock (2,3 & 4 of Zone A on map 1)

Background - These three sites have been used for rough grazing primarily by ponies and they are also frequently grazed by deer. They have not been ploughed in the recent past and are generally of poor grazing quality although it is thought the field upstream of Claybokie has been limed in the past. Although improved in the past these fields have now reverted back to unimproved acid grassland. The Claybokie paddock is used frequently by oystercatchers, gulls and lapwing, particularly near to the river and it is also

commonly used by brown hares. The field upstream of Claybokie has a pool providing valuable habitat for invertebrates and dragonflies have been observed there. A vegetation survey has been conducted on the field upstream of Claybokie and this revealed a relatively diverse sward but with no particular vascular plant rarities. Again wildflower species were numerous, including common violet and birds foot trefoil suggesting this area may be important for butterflies. There are no demands on the ground to fulfil estate needs (other than possible limited pony grazing from the end of the stag season until spring time) and no important cultural heritage interest in these areas.

Objective - These fields present an opportunity of continuing minimal management. The objective for these fields is to let them continue to revert back to their natural state and to conserve the biodiversity associated with this process.

Table 2. – **Zone A** Objectives and actions

Site Zone A	Objective	Actions	Monitoring/measure of success
1.Little Inverey	1. Retain and conserve cultural heritage 2.Maintain and enhance biodiversity interest	1.Conserve historical field boundaries through appropriate fencing or dyke reconstruction. Consultation with archaeologists required for this. 2.Conduct baseline fixed point photography of historical field boundaries 3. Investigate SRDP options for enhancing biodiversity interest that are compatible with the cultural heritage objective. 4. Write and implement grazing management plan that will incorporate any grazing models arising from Trust and / or successful SRDP initiatives 5. Conduct baseline vegetation surveys of all areas not yet surveyed 6. Conduct baseline wader survey 7. No reseedling or fertilisation will occur as this may have detrimental impacts on biodiversity.	1.No decrease in sward diversity after 5 years. 2.No decrease but a potential increase in wader numbers after 5 years when surveys shall be repeated.
2.Loin a Veach paddock, Field upstream of Claybokie and Claybokie paddock	1.Allow to revert to natural	1.Control ragwort when necessary through grazing. 2. Allow estate pony grazing from mid-October to spring if required. 3. Conduct baseline vegetation surveys of all areas. 4.Conduct baseline wader surveys of the field upstream of Claybokie and Claybokie paddock	1.Repeat vegetation surveys after 5 years to record change. 2. Repeat wader surveys after 5 years to record change.

4.2) Zone B

1. Fields within the Mar Lodge Policies (3 fields)

Background – These fields sit within the Mar Lodge policies which contains a mosaic of different types of grassland, woodland and wetland. The biodiversity value within the policies, including the agricultural fields, is already considerable. In the past, the fields were used as agricultural land and parkland. They are of varying pasture quality and would be classed as semi-improved grassland. In recent years the fields have been grazed by sheep and cattle and also used for silage production. Until two years ago the field in front of the Stable Block received NPK fertilisation to facilitate the silage production. A vegetation survey was conducted of this field in 2009 and this showed a clear dominance of Common sorrel and presence of agricultural species such as *Lolium perenne*, *Phleum pratense* and *Trifolium* sp. and no particular vascular plant rarities. Brown hares make frequent use of the fields within the policies.

As the fields lie in front of Mar Lodge itself and associated buildings the fields are important from a landscape and visitor perspective. There is a need to keep the vegetation under control and maintain good visual order. The fields should be in keeping with the lodge and create a good impression for visitors. Furthermore, these fields form part of the cultural landscape around the lodge and this historically would have been agricultural or parkland.

Objectives – The primary objective for these fields is to maintain them in a condition in keeping with the lodge and this is most easily achieved through the continued summer grazing of these areas. Recognising the existing biodiversity interest in the areas, a secondary objective will be to explore opportunities to further enhance biodiversity.

Table 3. - Zone B Objectives and Actions

Site Zone B	Objective	Action	Measure of success
1. Fields within the Mar Lodge Policies	1. Maintain fields in a condition in keeping with the lodge 2. Explore opportunities to further enhance biodiversity	1. Continue summer grazing regime of the fields. Grazing should be sufficient to keep area in good visual order and be detailed in the grazing management plan. 3. Create “hare” gates within existing fencing to facilitate hare movement around the area. 4. Leave uncut margins outwith livestock field boundaries to improve habitat diversity and connectivity	The area is good visual order Creation of hare gates and uncut margins

4.3) Zone C

1. Craggan & 2. Quoich (unfenced areas west of river)

Background – Both of these areas have a history of grazing by livestock and wild herbivores. The field areas have been improved in the past but are now at various stages of reverting back to semi-improved or unimproved grassland. In recent times both areas have been grazed mainly by ponies and deer with some occasional sheep grazing to control ragwort. No vegetation survey has been conducted of the Craggan (1) but it is probably classed as unimproved grassland. Parts of the area are wet and dominated by rushes and there are also areas with high thistle abundance. The Quoich area (2) can be sub-divided into two distinct areas 1. An agricultural field adjacent to the Craggan wood and 2. A very wet and marshy area west of the river around Lochan a' Chreagain. In 1996 when a vegetation survey was conducted of this area, the field was classified as improved grassland. However in the 14 years since this survey, this area has reverted to semi-improved grassland. This is because there has been no further fertilisation, drains have been blocked making the area much wetter and also it is now frequently flooded during high water. This change is indicated by the slow spread of rush species across the field. The wet and marshy area around Lochan a' Chreagain supports varied habitats (marshy grassland, valley mire, wet heath communities, open water communities, dry shingle ridges) and is species diverse. This area is on the whole very wet and dominated by sedge and rush species. While in the past this area may have been used as farmland it cannot really be classified as this now. No formal surveys of the fauna in these areas has been conducted with the exception of bird surveys. The areas are important breeding areas for wading birds including lapwing, oystercatchers, redshank, snipe and curlew. Some work has been carried out blocking drainage ditches in an attempt to improve the habitat for these waders. Brown hares are common throughout all of Zone C. It is clear that these areas have significant biodiversity value but there is no particular cultural interest or requirement from the fields for the estate. The areas have been little managed since NTS acquired Mar Lodge Estate and they have already begun the process of reverting back to their natural floodplain state. This process is being facilitated by the now regular inundation of parts of the area through the degradation of the flood defences.

Objectives – The objective for the 1. Craggan & 2. Quoich (unfenced areas west of river) in Zone C is to let the areas revert back to their natural state and to conserve the changing biodiversity associated with this process.

3.Quoich (fenced areas east of river)

Background - This area has some cultural interest having been historically used for grazing and arable land and it still retains a historical field system. The area has not been ploughed since the 1980's but it has been grazed by sheep and cattle in recent times and is currently seasonally grazed by sheep and cattle. This area was recorded as predominantly improved grassland with the exception of one field in 1996. However in the last 14 years with little agricultural treatment this area has reverted more towards semi-improved grassland. Blocking of ditches and seasonal inundations around the fields has also caused them to become a little wetter and has resulted in some rush encroachment. The fields are ring fenced by a deer fence, however the internal stock fencing splitting the individual fields is in a state of disrepair. Like areas 1 & 2 in Zone C, this area is important for breeding waders and these are currently surveyed every three years by RSPB. This area provides opportunities for enhancing the biodiversity interest particularly through improving the agricultural habitat for black grouse and farmland birds and also building on previous work (dam building/drain blocking) to further enhance the habitat for waders.

The fields make a significant contribution to the local landscape as you head west from Braemar. The bright green of the fields alongside the river Dee provides an attractive foreground for the wild, spectacular backdrop of the Cairngorm mountains.

Objectives – Area 3. Quoich will continue as agricultural land to maintain cultural heritage interest and the landscape character of the local area. However, within this, the objective of the fenced fields is to explore options which will conserve and improve the biodiversity interest, focussing particularly on farmland birds, waders and black grouse.

Table 4. – Zone C Objectives and actions

Site Zone C	Objectives	Actions	Monitoring/Measure of success
1.& 2. Craggan & unfenced Quoich	1.Allow areas to revert back to natural	1. Ensure three yearly bird surveys are continued. 2. Conduct vegetation survey to establish current state and change since 1996 when previous survey carried out. 3.Continue grazing when required for ragwort control. 4. Carry out 5 yearly fixed point photos of the areas to record change 5.Maintain artificial dams created in previous wetland restoration project	1.Wader monitoring showing no change or an increase in wader numbers using the site. 2.Repeat vegetation survey after 5 years to indicate rate of vegetation change.

		6. Allow estate pony grazing in the Craggan field 7. Explore options for visitor interpretation at the Quoich car park about the floodplain areas	
<i>3.Quoich (fenced fields)</i>	1.Continue agricultural practices to retain the cultural interest and to retain the landscape character 2.Investigate and pursue options to improve and enhance the biodiversity interest	1.Explore options through SRDP to improve the biodiversity interest of the area. Options could be a. Wild bird seed mix/unharvested crop, b. Biodiversity cropping on in-bye and c. Open grazed or wet grassland for wildlife,d.Creation/management/restoration of species rich grassland. 2. Write and implement grazing management plan. This should incorporate the grazing requirements for any SRDP options awarded. 3. Maintain internal boundary fences. 4. Ensure three yearly bird surveys are continued. 5. Once details finalised for grazing and SRDP options, develop monitoring methodology to measure success in improving the habitat for birds. 6. Obtain expert assessment of risk of deer fence to black grouse and mark fence if deemed necessary.	1.Increased usage of the areas by farmland birds and black grouse reflected through monitoring. 2.Fence monitoring indicating no black grouse fatalities on the perimeter fence Wet areas for wading birds present. 3.Wader monitoring showing no change or an increase in wader numbers using the site.

4.4) Zone D – Areas of the wider estate that could be used for extensive grazing

Background – Historically moorland, grassland and woodland areas of the wider estate may have been used for extensive summer grazing of sheep and cattle. Many areas have assigned farm codes indicating they have been registered grazing areas in the past and shieling sites scattered across Mar Lodge are a lasting remnant of the farming history on the estate. Mar Lodge Estate is currently reducing grazing levels across the estate through deer reduction with the aim of encouraging the natural regeneration of the Caledonian pinewood and the restoration of other upland habitats. At present there is no desire to return livestock to these areas as it would generally not be compatible with the current aims and objectives. Putting livestock back into the hills could also be considered to detract from the wild land quality of the estate and may potentially raise access and health and safety issues depending on the species involved. Despite this there may be an argument in the future for using livestock, particularly cattle as a conservation tool to create ground disturbance for tree regeneration. The trust would be willing to consider this if it was likely to have conservation value but it would not be undertaken without due consideration to the Trusts policies and the estates management principles.

Objective – Livestock will be confined to the low ground considered farmland within the estate unless being used for conservation purposes.

5) CONCLUSION

This document outlines a plan for the management of the farmland which aims to have conservation of the natural and cultural heritage at its core but also hopes to provide a balance between the different interests of the estate. In some areas action will be taken to enhance biodiversity, in others cultural heritage is considered the priority whereas in others no management is prescribed and land is allowed to revert back to “natural state”. The plan has also recognized the importance of the local landscape to the local people and visitors and tried to retain the special landscape qualities of the Dee floodplain and valley.

6) REFERENCES

Robinson, N. 2009 Vegetation survey of improved fields on the National Trust for Scotlands Mar Lodge Estate. Internal Report.



the National Trust
for Scotland
a place for everyone

VII

Mar Lodge Estate

Monitoring & Research

Introduction

The Mar Lodge Estate Independent Review highlighted the need for the NTS to ensure that its management of Mar Lodge Estate, which is necessarily complex and by no means straightforward, must be properly informed by accurate monitoring and specific research.

While the estate has always had a comprehensive monitoring regime in place, the results of such monitoring have not always been made public. This is something that will change, and ensure that results are communicated effectively, through a variety of means.

Monitoring and research will also be stepped up. The Mar Lodge Estate IRP highlighted that while ecological monitoring is robust, monitoring of other activities on the estate, particularly fieldsports has been subject to less monitoring and at times, record keeping has been poor. Improvements will be made.

It is not an exaggeration to state there have been vast amounts of research carried out on Mar Lodge Estate, during both the Trust's ownership and under previous owners. This research has been conducted both by the Trust's own staff and volunteers, but also by a great many universities through students completing post graduate degrees etc. Again, this research has not always been easily accessible by other interested parties.

Additionally, research on the estate has not always been targeted towards the needs of the estate's management. Each year, NTS staff on the estate, supervise and support a large number of research projects and it has now been recognised that it would be beneficial to have a framework in place to support this, and to help deliver on the research needs of the estate as well as the interests of students.

To address these needs, we will within 12 months of publication of this management plan, a full Research & Monitoring Plan will be developed, bringing together the needs of the estate, students and the statutory bodies to which the estate has a commitment. The Trust will also seek to develop relationships with universities and other bodies who may help us to deliver on the plan.

In the meantime, three key documents form a basis for such a plan. A review of monitoring was conducted by NTS and SNH in 2011, the results of which are included here. A "research ideas" paper was also produced in 2011 which will form the basis of a more formalised research agenda. Finally, a bibliography of research conducted on the estate was also collated by estate staff in 2011. This is also included and published here as part of a refreshed commitment to sharing work. Collectively these documents will form the basis of the new plan.

Ecological monitoring review 2011

Background

The ecological monitoring programme for Mar Lodge was last reviewed in 2007. With the management plan review underway and the knowledge that there may be a changing requirements for monitoring, it now seems like a good time to have another review of the monitoring being carried out and to decide the monitoring to put in place for the coming years. This document runs through the monitoring programme agreed in 2007 and summarises how we have got on with this. It also outlines any further monitoring that may have been completed which was not outlined in 2007 but has cropped up through the years. Finally the document details new monitoring needs that are emerging and also possible research possibilities to consider.

The Cairngorm LBAP group is currently reviewing its priorities and we need to consider these when making decisions about the Mar Lodge monitoring. However, the outcome of the LBAP review is unlikely to be available until springtime. Despite this it is probably worthwhile to have a first look at the Mar Lodge monitoring as there are elements which are not dependent on the LBAP review process and that we can decide upon now.

Possible research ideas are incorporated briefly in this document. As an organisation I think we should be more pro-active in getting collaborative research projects off the ground which are focussed on our research interests at Mar Lodge and answering management related questions.

Table 1 details the monitoring agreed in 2007 and how this has progressed.

Table 2. details monitoring not agreed in 2007 but which has commenced in the intervening years.

Table 3 details new monitoring which has arisen or is likely to arise along with possible research ideas.

Table 1. Monitoring programme and progress as agreed in 2007 (*for full explanations see 2007 document*)

Monitoring	Method & time (approx)	Progress
HIGH PRIORITY		
1.Measuring large-scale changes in habitats and human impacts on Mar Lodge Estate	Aerial photos	Aerial photos of estate from 1995/7 held but not ortho-rectified. SNH have digital aerial photos of the estate from 2006. Possible to look at change in these photos in the extent of habitat types, human impacts etc but would cost to have photos ortho-rectified and analysis done. In 2011 have taken a set of fixed point photos of the regeneration zone (see below). Track monitoring was established in 2009 (see Table 2.)
2. Monitor woodland regeneration (Ecologist)	Regeneration transects (11 x 1km) <i>11 days</i> and quadrats (17 x 10mx10m) <i>12-15days</i>	Completed every two years and annually respectively as planned. Results showing improvement in the regeneration in terms of growth, browsing and recruitment. Considering adding a few more transects and a new cohort of trees into the quadrats. Need to discuss. (KPI linked)
3. Monitor alpine scrub (Ecologist)	Alpine scrub quadrats (4 paired 10m2 quadrats) <i>4 days</i>	Completed every 4 years. Change has been slow and no clear trends have been observed to date. Will be interesting to see the results in 2012 after significant deer reduction. Some questions raised re methodology in 2007. Need to discuss.
4. Monitor moorland quality (Contractor)	Habitat condition assessment	Been contracted out every 5 years. Shown clear reduction in grazing impacts across the estate. Repeat in 2015. (KPI linked)
5. Red deer counts (stalkers)	Helicopter counts (<i>2days</i>) and casual observations when out on the estate	Counts will continue as outlined in the Deer management plan, 2 helicopter counts per year. Stalkers making casual observations.
6. Monitor the condition of culled deer (stalkers)	Recording condition of deer as they pass through the larder	Ongoing. Need to check this is being carried out and datasheets stored and data entered into the database.
7. Monitor numbers of woodland grouse at leks (mar lodge staff)	Lek counts <i>2 mornings</i>	Ongoing. Lek counts conducted twice annually. Data contributing to Deeside totals via the black grouse study group. (potentially linked with Biodiversity action KPI)
8. Measure breeding success of woodland grouse (stalkers)	Brood counts with dogs <i>3 days</i>	Conducted every year but varying consistency in woods counted and effort. Need to clarify the methodology with Chris. Possibly advice from GWCT. Need to discuss. (potentially linked with Biodiversity action KPI)
9. Monitor raptors (raptor	Nest watches and identification,	Eagles and merlins monitored each year working with raptor study group. Now get

study group and ecologist)	ringing chicks. <i>5 days</i>	reasonable information and data from them. Peregrine monitoring has slipped due to ill health and lack of communication with John Hardey. We could take this on if resources allow. Need to discuss. (potentially linked with Biodiversity action KPI)
10. Capercaillie drive counts (stalkers & ecologist)	Driven counts with a number of people. <i>1 day</i>	Conducted annually except for a few years when attention was on the deer cull. Good to discuss standardisation of methodology. (potentially linked with Biodiversity action KPI)
MEDIUM PRIORITY		
1. Monitor woodland shrub layer and ground flora.	Backmeroff transects (every 10 years) <i>20 days</i>	Completed for second time in 2008. Illustrated the lack of recruitment to the woodland and ongoing death of mature trees. Potential for short publication
2. Research pine seed productivity and viability (Forest research and ML staff)	Cone collections	Decision made in 2007 not to continue with this. However may want to think about this again in light of Long Term Forest Plan.
3. Monitor upland habitats	Not specified	No specific work outlined in 2007 other than to look at existing reports covering upland habitats.
4. Monitor deer range use and density (stalkers & ecologist)	Route counts, dung counts & calf tagging	Decision made in 2007 to continue with calf-tagging and terminate summer deer counts and dung counts on regeneration transects. Calf tagging has ceased (I think !), summer route counts have ceased and limited dung counts are ongoing on regeneration transects and quadrats. These have demonstrated a clear reduction in deer use of these areas. Potential to monitor Linn of Dee area - discuss
5. Count red grouse and ptarmigan (stalkers)	Transect counts and km2 counts	In 2007 ptarmigan monitoring put on hold until outcome of shooting issue. Since then have contributed to some NTS wide monitoring a few years ago for one year and ptarmigan counted annually during dotterel survey on Beinn a Bhuid. Stalkers carry out red grouse counts and brood counts - perhaps need to check this is being done and the methodology standardised across sites.
6. Count wading bird species on the Quoich wetlands (RSPB)	Visual survey made tri-annually <i>3 days</i>	Three yearly bird surveys have been conducted by RSPB. Initially demonstrated an increase in wader numbers but situation more complex now with different species faring differently. These should continue and importance of bird survey increased if we go ahead with SRDP application for the wetland area. Vegetation survey conducted in 1996 but due to be repeated for Farmland Action Plan (see later)
7. Beinn a Bhuid track	Annual fixed point photos	Annual fixed point photos of the track have been completed. Four yearly monitoring of the quadrats established in 1998 have been completed. Last years report still to finish. Results

restoration (ecologist)	Four yearly detailed quadrat monitoring.	suggest the vegetation cover is increasing on the treatments but this is also being observed in the controls. Could be related to climate change or grazing pressure ?
LOW PRIORITY		
1.Count salmon in the river Dee (DSFB)	Electro-fishing	Not clear on what data is collected. DSFB do conduct red counts and have had a couple of electro-fishing trips up Glen Dee.
2. Monitor wood ants monitoring		No specific monitoring specified after 2007 review. Did however embark on a Narrow-headed wood ant project and monitoring. This is detailed below.
3. Red squirrels (ecologist)	Two 1km transects monitored monthly <i>2 mornings per month</i>	Transects at Victoria bridge and Quoich monitored monthly. This was a bit sporadic for a while but has been conducted thoroughly the last few years. Need to discuss the value of this and the context with the NTS red squirrel plan. Look at baseline monitoring for the wider estate. (potentially linked with Biodiversity action KPI)
NEW MONITORING		
1 Black grouse use of re-structured plantations.	Transects through plantations and other habitats	Never started.
2. Monitoring of priority montane bird species. (ecologist)	Foot surveys of specific areas <i>1-2 days</i>	Started monitoring of snow bunting and dotterel. Snow bunting monitoring has ceased due to resources and practical difficulties. Annual monitoring of dotterel on Beinn a Bhuidh has continued. Ptarmigan also counted. Data contribute to national picture of dotterel. (potentially linked with Biodiversity action KPI)
3. Deer use of plantations (ecologist)	Dung counts	Dung counts conducted for 3 years in plantations on the estate 2003-6. These gave a picture of the extent of deer use by red and roe deer of these areas. It examined seasonal use of the plantations and use of the different habitats within the plantations. Deer use of the plantations was declining across the study period.
4. Monitoring of the 2001 Derry fire site (ecologist)	Quadrats and examination of mature trees <i>10-15 days</i>	The Derry fire site has been monitored every two years since 2003 examining the tree regeneration, deer use and vegetation response on the fire site versus and adjacent control area. The monitoring was due to be reviewed this year and has not been carried out. The results are of interest both in respect of deer use of the areas, vegetation recovery and tree regeneration. It has the potential to be written up and published when time allows. Need to discuss whether to continue with this.

Table 2. Additional fieldwork that has been conducted since 2007 not in the original review of monitoring

Monitoring	Method and time (approx)	Progress
1. Monitoring long term change (ecologist)	Fixed point photos of the woodland area of the regeneration zone. <i>10 days</i>	Set of photos taken Aug/Sept 2011. View to repeating in 5 years time
As above	Fixed point photos of Coire Etchachan juniper <i>1 day</i>	Photos taken in 2010 with view to repeating every 5 years
As above	Fixed point photos of Clais Fhearnaig broom <i>0.5 day</i>	Photos taken in 2010 with view to repeating every 5 years
2. Regeneration mapping (in house contractor)	Foot survey	Mapped visible regeneration across the regeneration zone within 50m of treeline. Repeat after 5 years - discuss ?
3. Deadwood removal (ecologist)	Fixed point photos taken 6 monthly of dead trees near Derry Lodge <i>2 hrs</i>	Photos taken every 6 months from 2005 to 2009 to demonstrate loss of deadwood around Derry Lodge. Photos been used in publication in Scotland outdoors to illustrate the issue of deadwood removal.
4. Deadwood management (ecologist)	Monitoring ring-barked trees to look at communities using the trees and rate of decay <i>4 days</i>	Monitored sample of ring-barked trees annually since 2006 looking at decay rate and use by species groups. Also recorded vegetation change after 5 years. Discuss whether to continue any monitoring as also action to ring bark trees within plantations
5. Deadwood survey (volunteer ecologist)	Quadrat based survey of presence of deadwood	Deadwood presence quantified within quadrats across the different areas of pine woodland. Work now been written up and to be hopefully published in Scottish forestry comparing deadwood at Mar Lodge with other woodlands in Scotland and Scandinavia.
2. Contributing to national	BTO Breeding bird square	Four squares and 2 waterways completed annually to contribute to national picture of bird

monitoring programmes (ecologist and rangers)	methodology <i>10 mornings</i>	abundance and trends. Use this data little ourselves.
4. Track monitoring - landscape change (ecologist)	Annual photographic monitoring of a sample of tracks <i>5-7 days</i>	Monitoring of a sample of ATV tracks on the estate began in 2009 using fixed point photography. This monitoring attempts to pick up where there is track deterioration, increased visual impact of the track and damage to any natural heritage features. There are some questions over the methodology which need to be discussed.
5. Monitoring non-native species - mink (ecologist & stalkers)	Six mink rafts checked fortnightly <i>0.5 day per month</i>	Using rafts to detect presence of mink across the estate. Contributing to the Cairngorm wolverine project. Ecologists run two rafts and stalkers four. Need to get stalkers rafts up and running.
7. Monitoring of wood ants (ecologist)	Annual fixed point photos of narrow headed ant nests (<i>1-2 days</i>) and three yearly monitoring. (<i>3 days</i>)	Fixed point photos have been carried out annually and monitoring of vegetation around the nest and nest dimensions recorded every three years. Some surveying to find further nests has been conducted and the number of wood ant nests now stand at 17 for the estate. (potentially linked with Biodiversity action KPI)
8. Monitoring of wild cats (ecologist)	Remote cameras <i>few hours every 2 weeks</i>	Two cameras have been run in different locations across the estate to try to pick up photos of cats (potentially linked with Biodiversity action KPI)
9. Monitoring of pearl bordered fritillary (ecologist)	Foot survey <i>2 days this year</i>	Invested some time in last year to try and relocate pearl bordered fritillary colonies from old records. Have re-found a number of colonies. Need to discuss whether we should think about butterfly monitoring (potentially linked with Biodiversity action KPI)

Table 3. New monitoring possibilities and possible research projects

Monitoring	Method and time (approx)	Progress
<p>1.Farmland action plan (fieldwork actions)</p> <p>a) Photography of historic field boundaries (ecologist)</p> <p>b) Baseline vegetation survey Little Inverey, Loin a Veach, Claybokie fields, Craggan and unfenced Quoich (ecologist or contractor)</p> <p>c) Baseline bird survey Little Inverey, Loin a Veach, Claybokie fields (ecologist or contractor)</p> <p>d) Fixed point photos to record change Craggan amd unfenced Quoich (ecologist)</p> <p>e) Maintain dams from previous restoration project (ecologist/estate team)</p>	<p>a) Fixed point photos <i>1 day</i></p> <p>b) No methodology decided yet</p> <p>c) No methodology decided yet</p> <p>d) Fixed point photos <i>1 day</i></p> <p>e) Hand and digger work</p>	<p>Need to agree who will do this work. May be potential for change in farmland action plan due to deer management or horses. Need to discuss Also likely to be work spawning from any SRDP application we submit should it be successful.</p>
2. Whole estate forest plan		<p>Will be need here to walk over areas to be planted, disturbed to check for natural heritage interest. Also we will have to monitor the success of the disturbed ground in terms of tree regeneration, vegetation recovery and the potential to look at use by woodland grouse etc. May also be work associated with and planting undertaken. Discuss (KPI linked)</p>
3. Existing scarification experiment		<p>We undertook some monitoring this year for Colin (4</p>

		days). May need to do the same next year if experiment is to continue. Discuss
4. Watervole/squirrel monitoring	Unknown as yet	In discussion with Brathay expeditions re then coming annually with a group and could undertake some watervole and/or squirrel monitoring. Currently do not monitor watervoles and have little knowledge of squirrels on the wider estate.
5. Twinflower work with Cairngorms rare plant project		Potentially under take work in collaboration with the Cairngorms rare plant project to establish a new population of twinflower at Mar Lodge.
6. Monitoring arising from the Cairngorms LBAP review		Local priorities will arise from this review and we may feel we should be addressing some of these.
Other areas of monitoring/research we could be considering: (see attached research document)		
1. Moths, bats and butterflies		Little attention has been given to these species groups. Simply raising the question whether we should be looking at these groups in some way ?
2. Deer movements		Should we be involved in trying to monitor deer movements - would probably need to be part of a big project
3. Climate change		Some research work being undertaken by RBGE on Mar Lodge. Should we be thinking of conducting any in house work on climate change ?
4. Carbon		How does the management on the estate influence carbon sequestration ? Possibilities for collaborative project ?
5. Ground flora development under regeneration		Recording changes in ground flora as regeneration proceeds

6. Determining the woodland history across Mar Lodge Estate	Pollen analysis & dendrochronology (live trees and roots in peat)	Use these techniques to build up a better picture of the woodland history across the estate. Could be done in collaboration with St Andrews and Coralie Mills who have done some work at Mar Lodge.
7. Predator control		Investigate the effectiveness of predator control and experiment with stopping predator control to monitor the effect (see research document)
8. Pine marten ecology		What is the density and distribution of pine martens ? What impact do they have on black grouse populations. How is the impact affected by the availability of other food sources and the density of foxes (see research document)

3/10/2011

Potential Research Projects for Mar Lodge Estate

Natural Heritage

Deer

There are currently questions being asked about the deer management policy that NTS has at Mar Lodge Estate. In particular these concern the potential implications of the management on our neighbouring estates and whether the methodology NTS have employed to encourage tree regeneration will deliver the objective. While there are gaps in our knowledge relating to deer management, ecology and behaviour, it is unlikely that this information will change the fundamental issues. This paper details where gaps lie in the knowledge base and what could be attempted to fill these gaps. It should be stressed that NTS does not need this knowledge to achieve its deer management and habitat objectives. This paper also lists the information that NTS currently holds relevant to our deer management.

Knowledge gap	Key questions	Data required	Methodology	Resources (comparative cost and labour)
<i>1.What is the evidence of the impact of Mar Lodges deer management on our neighbours sporting culls</i>	Have sporting culls reduced and if so by how much ? Who are the main producers and shooters of sporting stags? Have deer populations reduced and by how much? If so, there any evidence that this is linked to culling or reduced deer populations on MLE?	Cull and count data from all our neighbouring estates Cull and count data from MLE	Analysis of population dynamics on a regional basis to identify changes in populations or cull levels and the causes of this. Need to be done in an honest and open way. Estates need not be individually identified.	Time and finance for someone to gather and analyse this data. LOW COST LOW TIME/LABOUR
<i>2.What impact does conservation management have on local employment/economy</i>	Does the management of MLE for conservation purposes result in more or less employment in the area? What impact does this, and other tourist-related income, have on the local economy in comparison with traditional management?	Historical employment data for MLE. Data on spend per MLE visitor in Braemar. Accommodation patterns. Comparative data from traditional estates (?Invercauld) + other conservation estates	Economic analysis of MLE and spin-off benefits in Braemar. Comparison with other estates	No In-House skills. Need to contract out. HIGH COST MODERATE LABOUR

		(Abernethy, Creag Meagaidh, Glen Feshie)		
3. Deer movements across the boundaries of Mar Lodge and neighbouring estates. Is there any evidence of a “vacuum effect” ?	How do deer move around the boundaries of Mar Lodge and our neighbours? Is there any evidence of immigration into Mar Lodge over and above the usual to and fro movements across the boundary ? How do deer move around the regen zone/moorland zone boundary ?	Start with count and cull data from Mar Lodge Estate and our neighbours. Could be extended to actually trying to study deer movements and gaining regular information on the movement and distribution of deer across and around the boundary of MLE. Probably focus on hind movements more than stags as hinds usually tend to move less, hence easier to detect immigration.	Depending on outcome of Qu 1. could move onto establishing deer movements. Most likely methods could involve – structured regular zoned counts, basic colour marking of groups of animals, calf tagging/branding in likely source areas (neighbours), GPS collaring (needs good sample size), aerial or satellite imagery (may now be possible but needs investigation).	Resources required to actually monitor deer movements with some regularity and accuracy are very high for all methods either in terms of finance or labour. Any project of this nature would be a huge undertaking. HIGH COST HIGH TIME/LABOUR
4. Why may deer move onto MLE ? Are there differences in habitat quality between MLE and our neighbours ?	What are the differences in forage quality and shelter provision between MLE and our neighbours ? What habitats are deer using on MLE and are these less available on neighbouring estates i.e. areas of good forage quality, shelter etc ?	Forage quality and availability data from MLE and neighbours. Habitat utilisation data from MLE to establish what habitats deer are using. Deer movement data.	Collect and analyse differences in forage quality and availability and shelter between MLE and neighbouring estates. Could establish habitat utilisation through pellet counting or through studying deer movements (see above). May be able to use proxy measures like hind weight and fecundity to indicate overall habitat quality.	MOD COST MOD TIME/LABOUR HIGH COST HIGH TIME/LABOUR
5. How effective could non-lethal methods of deer control be that fit with our objectives and principles ?	Could deer be scared out e.g. by dogs, scarers, repellents, shooting over?	Data on historical trials of scarers. Data from experimental trials of scarers we could conduct.	Review historic research data. Do some experimental trials with scarers ourselves.	MOD COST MOD TIME/LABOUR
6. Is NTS management succeeding ?	NTS has been managing MLE for 16 years. Are we succeeding in our	Data from tree regen monitoring. DCS/FC/SNH	Review of monitoring data collected to date. Future	MOD COST MOD TIME/LABOUR

	managment goals and, if not, what changes to management are required?	site condition monitoring. Results from seedling establishment trials	projection of rates of seedling establishment + tree growth. Identification of additional planting needs. Deer management feasibility study.	
--	-----------------------------------------------------------------------	-----------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------	--

Climate change & carbon sequestration

Knowledge gap	Key questions	Data required	Methodology	Collaboration, existing research etc
1. Evidence/Impact of climate change on the montane species and habitats	Are there observable changes in the montane habitats and species that are related to climate change ? How may these changes impact on species of conservation importance and Is there any action that can be taken to mitigate against these ?	Long term data collection on appropriately selected indicator species and species of conservation importance	Habitats – establishment of permanent long term plots (probably along an altitudinal gradient) for appropriate habitats/indicator species for monitoring on a 5 yearly or so basis Species – regular (annual) monitoring of bird populations (dotterel/snowbunting/ptarmigan)and breeding success. Monitoring of invertebrate emergence times.	RBGE have established some long term high altitude monitoring plots for lichens on the estate. Some work has been carried out looking at tipulid emergence times in relation to dotterel nesting time. We have been collecting data on dotterel numbers on Beinn a Bhuid and dotterel are monitored across other sites. Need to research fully what work has been conducted in this field and would probably look to collaborate in this work or at least have specialist input.
2. How does management influence carbon sequestration by peat	What management can be employed to increase carbon sequestration in peatland areas	Data on rates of sequestration/loss in different management situations	Not sure, need to investigate	Would envisage collaborative project probably with the Macaulay Research Institute.

Habitat

Knowledge gap	Key questions	Data required	Methodology	Collaboration, existing research etc
1. Ground flora development under regeneration	How is the ground flora changing now regeneration is proceeding ?	Data on ground flora composition and cover	Establish plots in areas with and without regeneration to record comparative changes on ground flora.	Could be done in-house
2. What is the best ground disturbance technique to deliver seedlings but minimise impacts on landscape and archaeology	What ground disturbance technique is practical and delivers the seedling numbers but has least landscape and archaeological impacts ? What size should ground disturbance patches be ?	Data from different disturbance techniques in different habitats and in varying distances from the seed source and of varying sizes	Establish trial plots of different sizes and distances from a seed source and in different habitats. Record seedling establishment.	Could be done in-house and may be tackled as part of the Whole Estate Forest Plan. Need to research fully what work has been conducted in this field.
3. Determining the woodland history across Mar Lodge Estate	What was the extent of woodland cover on the estate and how did this fluctuate over the years ?	Pollen analysis data from locations across the estate. Ageing of pine roots and further ageing of pine trees across the estate	Collect soil cores for pollen analysis and age tree roots and trees	Collaborate with Forest Research and St Andrews University who have started this work.

Species

Knowledge gap	Key questions	Data required	Methodology	Collaboration, existing research etc
1. What is the role of essential symbiotic fungi in the afforestation/reforestation of areas	What are the interactions between mycorrhizal colonisation and current management practices eg fertilizer additions when	Information on fungi associates with pine roots and whether these are present/absent in	Determine presence absence of mycelium in moorland habitats. Experimental trials with inoculation of trees with appropriate mycelium	This project would require collaboration. Work is ongoing in this field.

<i>adjacent to existing scots pine stands.?</i>	<p>planting pine seedlings.</p> <p>Can the ground flora indicate areas where the mycorrhiza are present and suitable for regeneration ?</p>	<p>moorland habitats.</p> <p>Information on how the presence of these affects tree growth.</p>	<p>and record effects along with a control.</p>	
<i>2. Is fox control on Mar Lodge estate effective in terms of increasing grouse numbers available to shoot and is it economic.</i>	<p>Does fox control have a positive effect on grouse numbers ?</p> <p>Is the cost of fox control less than the potential increase in grouse bags obtained from carrying it out - do the figures add up ?</p> <p>Can the conservation benefits of fox control be quantified ?</p>	<p>Difficult issue to research and need either control and treatment areas or before and after data collection. Potentially difficult to control for other variables.</p> <p>Need data on fox and grouse numbers, grouse bags.</p> <p>Costs associated with fox control, grouse shooting and income associated with grouse shooting.</p> <p>Data on impact of fox control on other species of conservation value – potentially use indicator species such as golden plover, black grouse</p>	<p>Need to establish control and treatment area but possibly Mar Lodge not big enough for this. Other option to go for a before and after treatment.</p> <p>Record foxes culled each year.</p> <p>Scat transects, spotlight counts</p> <p>Grouse pair counts and brood counts. Bag data</p> <p>Financial info on costs associated with fox control and grouse shooting along with income generated.</p> <p>Data collection on other indicator species – golden plover density, breeding success etc</p> <p>Black grouse lek counts</p>	<p>This is a large project and probably best tackled collaboratively although the economic work could be done in-house.</p> <p>It would also need acceptance that we stop fox control for a number of years</p>
<i>4.What is the density and distribution of pine martens on Mar Lodge</i>	<p>What density of pine martens do we have on the estate, how are they</p>	<p>Data on pine marten density and distribution</p> <p>Information on pine</p>	<p>Scat transects</p> <p>GPS collaring of pine martens</p>	<p>Potential PhD project. Look for university collaboration. Or look for project funding and employ</p>

<p>Estate ?</p> <p><i>What impact do pine martens have on black grouse and capercaillie productivity ?</i></p>	<p>distributed and what is their range size ?</p> <p>What impacts do pine martens have on woodland grouse productivity and how is this impact affected by small mammal population cycles ?</p>	<p>marten diet</p> <p>Data on nest predation by pine martens</p> <p>Data on vole populations, analysed in conjunction with pine marten diet data</p>	<p>Scat analysis</p> <p>Baiting stations camera traps</p> <p>Capture-mark recapture</p> <p>Small mammal capture-mark-recapture</p>	<p>project officer. CNPA may be interested in funding.</p>
<p><i>5.Can new populations of twinflower be successfully established & what habitat management can enhance the habitat for twinflower.</i></p>	<p>Can we successfully establish a new population of twinflower at Mar Lodge ?</p> <p>What habitat management would improve the vigour of our current twinflower populations ?</p>	<p>Genetic analysis of current populations.</p> <p>Information on suitable sites for establishment of a new population.</p> <p>Data on the effect of different types of habitat management on twinflower growth and reproduction</p>	<p>Genetic analysis</p> <p>Determination of areas suitable for twinflower</p> <p>Trials with different habitat management and the response of twinflower to these. Could be experimentally introduced plants.</p>	<p>Project in some way underway in collaboration with the Cairngorms Rare plants project. Need further discussion with project officer re next steps at Mar Lodge.</p>

VIII

MAR LODGE ESTATE MANAGEMENT PRINCIPLES 2006

The management of the Mar Lodge Estate (MLE) will be based on delivering the core purposes of The National Trust for Scotland (NTS), as defined in its Order Confirmation Acts of 1935 and 1938, and on the NTS' Strategic Policies.

The Principal aim of the NTS shall be to manage the Estate in a sustainable manner for the benefit of the nation, ensuring the continuing conservation and restoration of its internationally important geology, flora, fauna, wild land quality and archaeological value;

Subject always to its management of the Estate in accordance with the principal aim and subject at all times to compliance with the Land Reform Act 2003 and the Scottish Outdoor Access Code:

- (i) The NTS shall ensure appropriate public access to the Estate, subject always to the maintenance of the landscape and nature conservation interests. The Trust shall promote best practice in the implementation of the SOAC;
- (ii) The NTS shall manage the Estate so as to conserve its valuable ecological and landscape features in harmony with its maintenance as a Highland Sporting Estate for so long as field sports remain legal. Such management will be carried out in a manner which will, so far as possible, enhance the social, cultural and economic well-being of the local community. Such aspiration to enhance the social and economic well-being of the local community extends collectively to all of the management and interests of the Mar Lodge Estate. Declaring that it is intended to demonstrate that the practice of field sports can be reconciled with the NTS' statutory obligation to promote public access;
- (iii) The NTS shall ensure that there is a presumption in favour of the natural regeneration of the native Caledonian pine forest through the effective management of the number of deer. Notwithstanding the foregoing, it is understood that in certain circumstances, for example where no suitable native seed source exists, some initial planting and fencing may be required but such planting shall not be carried out in areas where the quality of heather moorland would be adversely affected;
- (iv) That part of the Estate lying to the south and west of the River Dee and comprising heather moorland shall be sensitively managed to promote its proper conservation in terms of grouse habitat, nature conservation and landscape;
- (v) The NTS shall not permit the development of facilities which would compromise the wild land quality of the Estate. The principle of "the long walk in" shall be maintained at all times and the hills shall not be made easier or safer to climb. Notwithstanding the foregoing in the short to medium term at least, access by the NTS' vehicles may be exercised to carry out effective conservation, deer management and field sports activities. Otherwise the NTS shall make continuous and constant efforts to dissuade, and where possible to prohibit, the use of mechanical or wheeled vehicles and all mechanical recreational activities beyond the immediate environs of the mansion house

known as Mar Lodge. The Trust shall promote implementation of best practice of the SOAC;

- (vi) The NTS will favour the continuing use of existing buildings for their original purpose. Notwithstanding the foregoing the NTS may carry out some development of Mar Lodge including a viable visitor facility but such development shall not compromise the principal aim so far as affecting areas beyond the immediate environs of the mansion house known as Mar Lodge;
- (vii) The NTS will share with the public an appreciation of the issues involved in managing the Estate as a wild land area, through appropriate interpretation and education;
- (viii) The NTS will manage the Estate recognising that it forms part of the wider Cairngorms area.

In a declaration to the Easter Charitable Trust (ECT), the NTS agreed to follow a set of principles in its management of Mar Lodge Estate. These principles were accepted by the NTS Council and became known as the Mar Lodge Estate Management Principles. Council noted that they would not be legally binding but would, in effect, be the donor's wishes, without which the ECT's funding would not have been forthcoming. They are, therefore, regarded as the equivalent of a statement of wishes of a donor of a property to the NTS and there is a moral obligation on the NTS to follow them.

In April 2005, the NTS and the trustees of the ECT agreed how the NTS would interpret and implement Principle (v) above in the light of the Scottish Outdoor Access Code (SOAC). It is therefore the intention of the NTS to encourage all visitors seeking responsible access to have the experience of walking in some of the remotest wild land of the Cairngorm mountains where impact of people and their activity remains minimal. The NTS will continue, therefore, to encourage all its users of the estate to respect its guidance on the use of paths and tracks as laid out in current and future signage and leaflets. In addition in accordance with its wild land policy the NTS will promote at every reasonable opportunity their commitment to the policy of "the long walk in" (from beyond the immediate environs of Mar Lodge) within the spirit of the SOAC, explaining to visitors why they should choose to support that policy.

As a national conservation body the NTS will also continue to use its influence to promote the protection of wild land quality as part of the SOAC. Notwithstanding the above, the NTS acknowledges and will comply with the rights conferred by the Land Reform Act (2003), particularly the access rights relating to the broad range of recreational purposes that may be enjoyed on the Estate.

In 2006, the NTS and the Trustees of the ECT agreed to amend the MLE Management Principles to reflect legislative changes and these management principles are now known as the Mar Lodge Estate Management Principles 2006, above.

Supplementary to the above Principles, in managing the estate, NTS will act in accordance with the terms and conditions set out in the Management Agreement between the NTS and SNH, registered and recorded on 31 July 1995.

IX

MAR LODGE ESTATE STATEMENT OF SIGNIFICANCE 29 March 2012

The landscape of Mar Lodge Estate is internationally significant for its scale and diversity, and for the individual landscape character types it contains. Overall the estate is a diverse landscape made up of montane plateau and corries, wooded glens, open moorland, upland glens and the more populated valley bottom of Upper Deeside, which provide a marked transition from managed to wild landscapes, and from low to high altitude. Upper Deeside is part of the nationally significant Deeside and Lochnagar National Scenic Area and the mountainous areas are recognised by the Cairngorm Mountains National Scenic Area. The landscape is also overlain with the imprint of human use over thousands of years – there are over 700 known archaeological sites, and an area of 260 hectares are designated as are designated as Scheduled Ancient Monuments of national importance.

Landscape

Diversity

Cultural Landscape

At the lower levels of the estate, although there are small pockets of wildness, there is potential to enhance the feelings of solitude and naturalness experienced in some areas. As the visitor moves through the estate towards its montane core, this transition provides an increasingly more remote and wild experience. The sheer scale of the montane area of the property and the active promotion of the long walk in to reach it enhance the feeling of remoteness. This is supported by the evidence of abandoned settlement – highlighting human retreat from these areas and giving them a sense of scale. Although visual carrying capacity is low on the plateau, when alone there is a high feeling of peaceful solitude – heightened by the NTS's proactive work to improve the naturalness of the high tops through, e.g., footpath repair, fence and track removal and woodland restructuring. This remoteness and the power of the landscape offer many visitors an emotional and spiritual experience, and for these reasons the Cairngorms are significant in the national psyche of Scotland.

Wildness

The montane plateau is on a massive scale – the largest in the British Isles - and is part of the Cairngorm Mountains National Scenic Area. It is a challenging landscape for visitors, especially in severe weather and, given its distance from roads and access points, it evokes a real sense of achievement for those reaching it. It is one of the areas least influenced by man in Britain.

Montane Plateau

The wooded glens, with their scattering of native pinewood, are an iconic Scottish landscape type. The landscape of Upper Deeside around the Lodge provides an attractive introduction to the estate for most visitors.

Glens and Deeside

The historic designed landscape at Mar Lodge has been likened to the idyllic landscape at Taymouth Castle in Perthshire, with its expansive setting, garden buildings and home farm. Created at the height of the landscape movement in Britain, Mar Lodge attracted the attentions of many writers of the day, who commented on and recorded the scene. Cordiner, for example, writing in 1776, recorded a gothic tower beside the river with, “on rugged parts of the hills, a bower, a high obelisk [and] a hermitage”.

Designed Landscape

Whilst none of these features can be seen today, the historic designed landscape at Mar Lodge was not only typical of its type but also one of the more significant in the north east of Scotland. Today, whilst not included in the *Inventory of Gardens and Designed Landscapes in Scotland* (1987) or its *Extension*, the designed landscape can be considered as being of regional significance on account of its history, architecture and archaeology. The estate has low horticultural value due to its limited plant collection and scant remains of the once well laid out formal walled kitchen garden to the east of the Lodge.

Horticulture

Mar Lodge estate is part of one of the most outstanding upland areas in Britain. The Cairngorms mountains, of which the estate is an important part, are of international importance for geomorphology. The area has been identified as a Geological Conservation Review site. The interest comprises an exceptional assemblage of pre-glacial, glacial, glaciofluvial and periglacial features. Together these provide a great wealth of information for interpreting landscape evolution and environmental change in the uplands during the Quaternary Period (2.6 million years ago to present). The Cairngorms include four of the five highest summits in the British Isles; Mar Lodge Estate hosts a 15 Munros – a third of the Munros in the care of the NTS.

Natural Heritage

Geodiversity

The Cairngorm area, with its wealth of cultural and natural features was designated as a National Park in 2003. Mar Lodge Estate is wholly within the Cairngorms National Park.

Cairngorms National Park

The estate contains a diversity and range of habitats from the valley floor at 300 metres to the mountain tops, the highest being Ben Macdui at 1309 metres. These areas are of international significance for the extent and variety of habitats and species they contain. This is recognised by large parts of the estate being designated as a Special Protection Area, Special Area of Conservation and a Ramsar site. The estate includes a significant part of the Cairngorms National Nature Reserve.

Habitats

The Cairngorms is the largest area of arctic alpine flora in Britain and, in particular, has the largest area of three-leaved rush (*Juncus trifidus*) heath in the world. The flora is one of the least modified by man, and snowbed, lichen and bryophyte communities are of special interest. In the montane zone there are also important breeding populations of dotterel, snow bunting and ptarmigan.

Alpine Flora

The estate supports areas of wet and dry heath as well as extensive areas of blanket bog. The heather moorland extends to an altitude of 1000 metres and there is some regeneration of scrub communities in the lower altitudes of this zone. The moorland supports important populations of red grouse, waders and raptors.

Heath and Moorland

Mar Lodge Estate has 3 separate areas of native Caledonian woodland covering almost 800 hectares—which is c. 5% of the total national resource. This habitat is important for red squirrel, black grouse, capercaillie, Scottish crossbill, parrot crossbill, wood ants, other invertebrates and fungi. Some of the Scots pines themselves are highly significant as ancient trees and they have provided the second longest native pine reference chronology in Scotland, stretching back to 1477.

Caledonian Woodland

These pinewoods are now elderly remnants of a much larger forest cover which has declined further over the last 150 years because deer browsing has prevented any natural regeneration. There is now an opportunity to enhance the significance of this habitat through native woodland restoration on a truly landscape scale.

The high level nutrient poor lochs are of arctic-alpine character and of international importance. The estate holds a large part of the headwaters of the river Dee, an important spawning ground for spring-run salmon, and is the finest example of a nutrient poor river system in Britain. The Quoich wetlands are an important area for breeding waders, otters and watervoles.

Lochs, Rivers and Wetlands

Mar Lodge is now one of the best studied estates for biodiversity and geodiversity in Scotland and has potential to continue expand our understanding of natural heritage features through ongoing research.

Educational Use and Research

There is a long history of human use on the estate, which has left its imprint on the landscape: from scatters of prehistoric worked stone objects, through medieval and later houses, fields, tracks, enclosures and plantations, to WWII aircraft crash sites. Many of the settlements are now ruinous or derelict and are a reminder of past ways of life and fluctuations in the population of the Highlands. There is potential to improve our understanding of how people used the estate through examining, e.g., changing land-use and the relationship between remote and peripheral locations on the estate.

Cultural Heritage

Time-Depth

Archaeological and other Evidence

Much of the archaeology has been recognised as of national importance because of its state of preservation at both a structural and landscape level, and its potential to enhance considerably our understanding of land-use and change from the 18th to the 20th centuries. In Glen Lui and Glen Dee there are some particularly fine examples of 17th-18th Century townships with their associated enclosures and cultivation features. In the remoter glens are the remains of hundreds of shielings, where, during the summer months, some members of the community lived whilst their cattle grazed the surrounding area. The visible archaeology is mostly from the medieval and post-medieval period, although research, including palaeoenvironmental analysis, is beginning to illustrate the use of the area in the prehistoric and early historic period; and particularly to track changes in the development of the pine woodland in the period when human activity began to have an impact on the landscape. The recent discovery of two Mesolithic sites - the first direct physical evidence of the presence of people in the Cairngorms from as far back as at least 5,000 BC – adds additional time-depth to this inhabited landscape.

The standing buildings on the estate are predominantly late 19th Century, although some incorporate elements of earlier structures. Together they form a group of considerable value, showing the patterns of land-use and management as well as social values and change in the 19th and early 20th centuries. The extensive work carried out by the former Mar Lodge Estate Archaeologist has greatly added to our understanding of the form and use of ruinous and standing buildings on the estate (including Mar Lodge), and elsewhere in Scotland.

Mar Lodge itself, restored following a fire in 1991, is still an impressive building, with a notable Bavarian influence in style, and of some architectural value. Its associations with the Fife family and Victorian royalty give added historical interest. It was built in 1895 for the Duke and Duchess of Fife, following the destruction by fire of a previous building, Corriemulzie Cottage. The foundation stone was laid by Queen Victoria, grandmother of the Duchess. The architect, A. Marshall Mackenzie, was the leading architect in Aberdeen during this period. The Duchess had an interest in art and has been credited with the unusual butterfly plan of the Lodge, which floods it with light and opens it up to the forest and the landscape. Although most of the interiors, such as the Dining Room and Billiard Room, reflect the native timbers and taxidermy of Corriemulzie Cottage, the Duchess's private rooms were in the international Adam revival style, much of which was executed in papier maché. Much of this was removed in a later 1930s modernisation along with the introduction of 18th century furniture from other family houses.

Mar Lodge

The Lodge originally had a tree-trunk verandah running around the house, but now only the porch survives. The removal of the verandah (during early 20th century) and a fire (1991) has reduced the aesthetic and historic significance of the building. What the visitor sees now is a brilliant insurance re-instatement of the original internal designs based on the original architectural drawings and photographs. Although the pine-panelling has been re-instated, the fire-proofing required today gives it a different surface texture in comparison with the doors of the original rooms, which survived the fire, along with much of the original furniture, being stored at the time in the detached Ballroom.

1990s Re-Building

Parts of the ground and first floor of the Lodge have been converted into holiday flats, providing some income to the estate. Many of the grand features of the Lodge in its heyday as a hunting lodge are retained. The principal rooms reflect something of their original appearance, furnished with many of the original pieces acquired by the NTS in addition to other pieces gifted or bequeathed to the NTS.

Interiors

A number of the remaining buildings have strong associations with the use of the estate as a Victorian shooting estate. These include the outlying lodges of Derry, Bynack and Geldie, Keepers' houses at Ruigh nan Clach, Mar Forest and Craggan, and a Watcher's cottage at Corroul, as well as the Ballroom and Deer Larder. Other recreational activities are also represented: Princess Louise's tearoom/Queen Victoria's Picnic Lodge is a fine example of picturesque rustic architecture.

Estate Buildings

Mar Lodge Estate has a very high profile in terms of medieval or later rural settlement studies and the new light it may shed on the inland Mesolithic in Scotland. It has the potential to expand our understanding of the cultural heritage resource, at a national and indeed European level, through ongoing research.

Research

Mar Lodge Estate is able to provide a wide range of experience for visitors. Our perception is that visitors arrive with a wide range of expectations and a vast range of reasons for enjoying and appreciating the estate.

The Visitor

The estate is at the end point of the road access up the Dee and is an important gateway for visitors seeking a "Cairngorms Experience" whether at low level or on the high tops. Many visitors come because of their interest in the natural environment or to challenge themselves – through walking and camping - with mountain ascents and an opportunity to experience the solitude, remoteness and spiritual re-charge of a wild land experience.

Cairngorm wild land

As part of Deeside, many visitors come as sightseers, because of the Royal connection, following the Victorian Heritage Trail. There are around 100,000 total visitors to the estate annually. A Cairngorm Mountain Recreation Survey (1997-8) found that about one-third of all visitors to the Cairngorms come via Mar Lodge Estate, 23% entering from the Linn of Dee and 9% from the Linn of Quoich. The estate therefore has high national recreational value. In the lower valleys the ruined townships provide a reminder of the greater extent of human occupation in the past; in outlying areas there are the remains of the 19th century sporting estate in the derelict and ruined lodges.

For many local residents, Mar Lodge itself is of considerable significance – a clear landscape feature and a tangible reminder of the long history of the estate. Many have memories of personal connections with the Lodge or estate. Events and Open Days provide opportunities for locals and visitors alike to experience the estate in new ways.

Many visitors come to enjoy field sports of shooting and fishing. The estate is an excellent sporting estate providing clients with a high quality of sport recreation, focusing on traditional highland methods. Sporting activity offers visitors an opportunity to witness this traditional activity on site, as well as to access less well known areas of the estate. Sporting visitors also spend at least a day on site, giving them a real opportunity to experience the property over several hours, accompanied by knowledgeable staff.

Mar Lodge Estate supports a diversity of economic activity based on the sporting, informal recreation and tourism uses, providing an important contribution the local economy and the upkeep of the estate itself. Investment in and development of these activities has provided long-term local employment, helping to sustain the relationship between the estate and the community.

The estate represents 35% of NTS's total landholdings, and its acquisition increased the NTS's standing as one of Scotland's major landowners. This gives the estate high national significance to the NTS for its impact on the history and reputation of the organisation. It provides a locus for defining, influencing and promoting best practice land and heritage management. The property is at the core of the new Cairngorms National Park – ownership of this major estate for public benefit is of high national significance to the NTS and to Scotland.

Sight-seeing

Hill walking and climbing

Recreational Use

Personal connections

Field sports

Social & Economic

X

Mar Lodge Estate

Designations over all or part of land area

May 2012

Special Protection Area
Special Area of Conservation
Site of Special Scientific Interest
National Scenic Area
National Nature Reserve
Ramsar Site
Cairngorms National Park
7 Scheduled Ancient Monuments
Geological Conservation Review Sites
Mar Lodge and St Ninian's Episcopal Church (B Listed)
Victoria Bridge (B Listed)
Victoria Lodge (B Listed)
Princess Louise's Tearoom/Queen Victoria's Picnic Lodge (B Listed)
Derry Lodge (C(s) Listed)
Mar Lodge Ballroom (B listed)